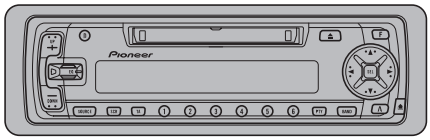
Service Manual

MEH-P5000RII/UC



ORDER NO.
CRT2377

MULTI-CD/MD CONTROL HIGH POWER MINIDISC PLAYER WITH RDS TUNER

MEH-P5000RII EW

MULTI-CD CONTROL HIGH POWER MINIDISC PLAYER FM/AM TUNER

MEH-P5000 UC

MEH-P5050 ES

NOTE:

● **US and foreign patents licensed from Dolby Laboratories Licensing Corporation.**

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K-ZZD MAR. 1999 Printed in Japan

1. SAFETY INFORMATION

1.1 MEH-P5000/UC

CAUTION

This service manual is intended for qualified service technicians; it is not meant for the casual do-it-yourselfer.
Qualified technicians have the necessary test equipment and tools, and have been trained to properly and safely repair complex products such as those covered by this manual.
Improperly performed repairs can adversely affect the safety and reliability of the product and may void the warranty.
If you are not qualified to perform the repair of this product properly and safely; you should not risk trying to do so and refer the repair to a qualified service technician.

WARNING

This product contains lead in solder and certain electrical parts contain chemicals which are known to the state of California to cause cancer, birth defects or other reproductive harm.
Health & Safety Code Section 25249.6 - Proposition 65

1.2 MEH-P5000RII/EW

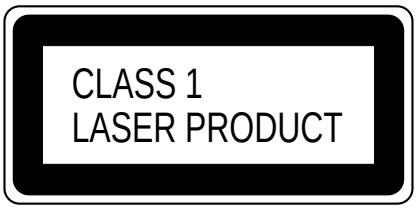
1. Safety Precautions for those who Service this Unit.

- **When checking or adjusting the emitting power of the laser diode exercise caution in order to get safe, reliable results.**

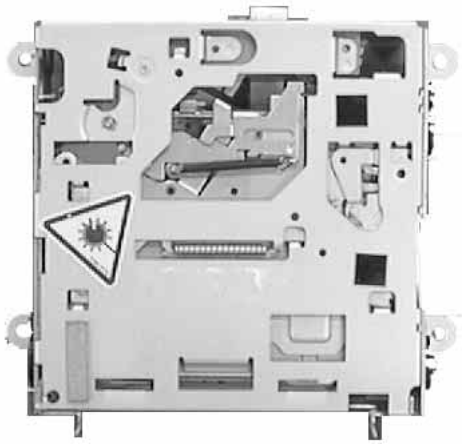
Caution:

1. During repair or tests, minimum distance of 13cm from the focus lens must be kept.
2. During repair or tests, do not view laser beam for 10 seconds or longer.

2. A "CLASS 1 LASER PRODUCT" label is affixed to the bottom of the player.



3. The triangular label is attached to the mechanism module frame.

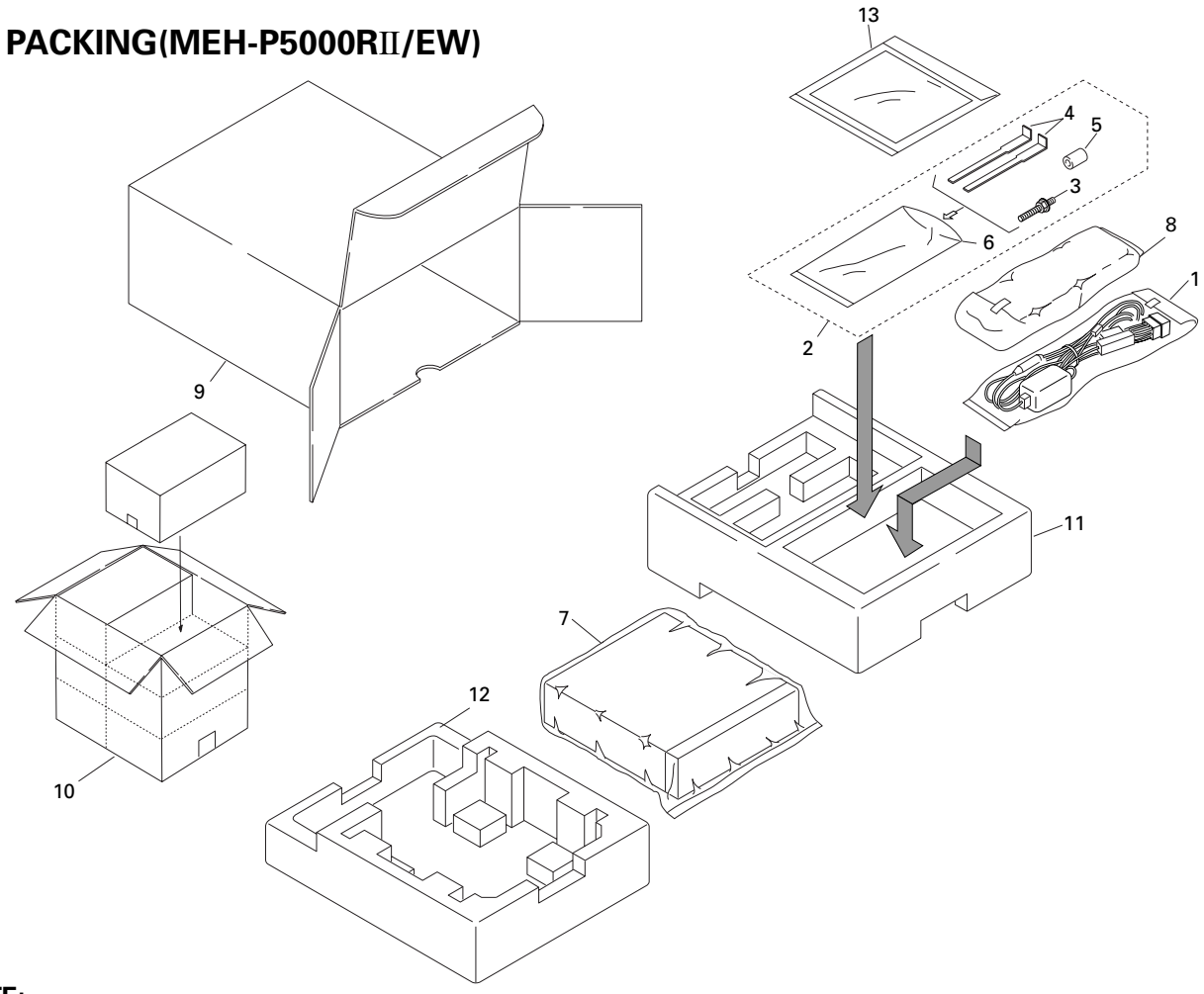


4. Specifications of Laser Diode

Specifications of laser radiation fields to which human access is possible during service.
Wavelength = 780 nanometers

2. EXPLODED VIEWS AND PARTS LIST

2.1 PACKING(MEH-P5000RII/EW)



NOTE:

- Parts marked by "*" are generally unavailable because they are not in our Master Spare Parts List.
- Screws adjacent to ∇ mark on the product are used for disassembly.

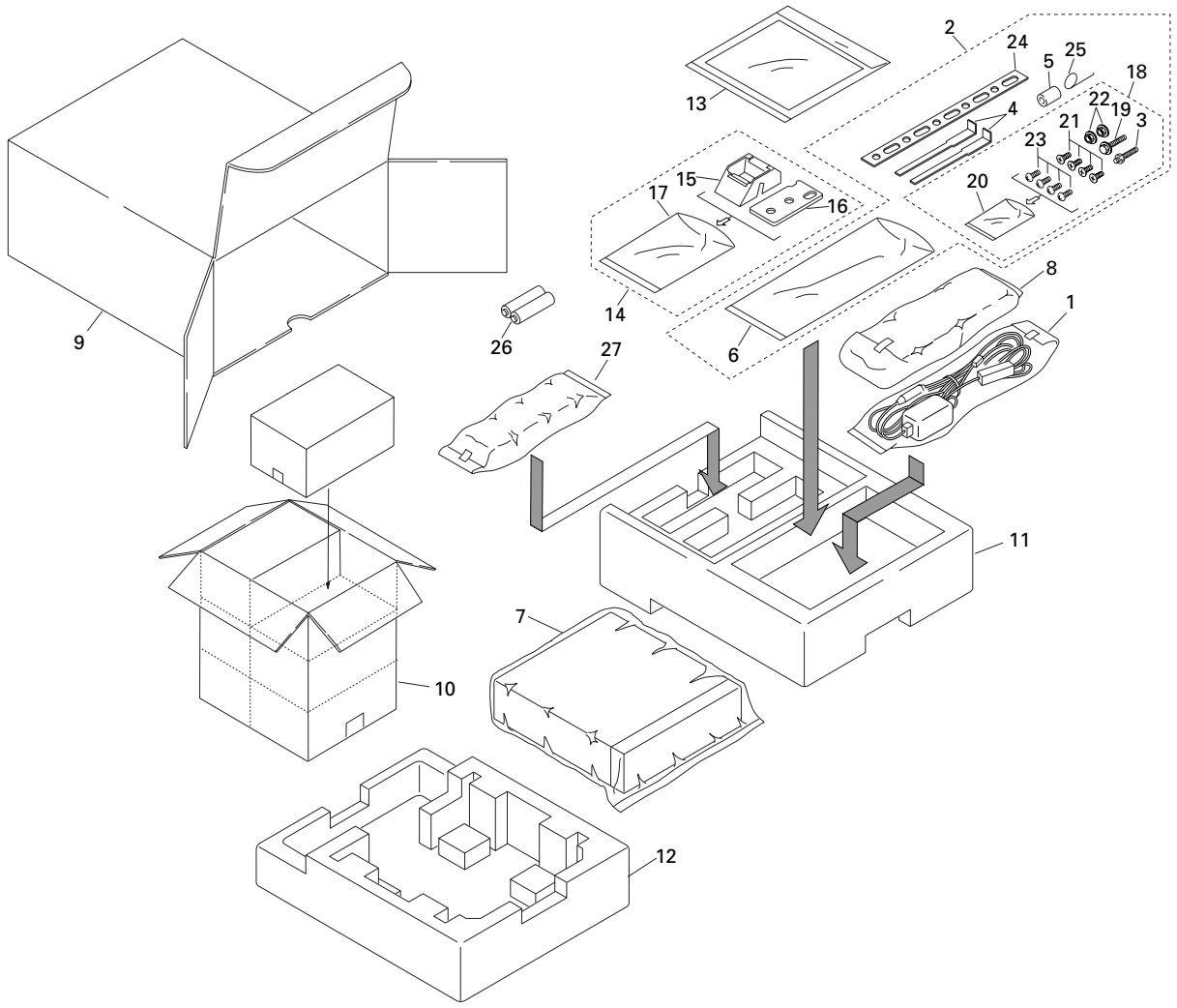
● PACKING SECTION PARTS LIST

Mark	No.	Description	Part No.
	1	Cord Assy	CDE5722
	2	Accessory Assy	CEA1917
	3	Screw	CBA1284
	4	Handle	CNC5395
	5	Bush	CNV1009
*	6	Polyethylene Bag	E36-615
	7	Polyethylene Bag	CEG-162
	8	Case Assy	CXB3520
	9	Carton	CHG3812
	10	Contain Box	CHL3812
	11	Protector	CHP2098
	12	Protector	CHP2099
	13-1	Polyethylene Bag	CEG1116
	13-2	Owner's Manual	CRD3033
	13-4	Owner's Manual	CRD3034
	13-5	Owner's Manual	CRD3035
	13-6	Installation Manual	CRD3036
*	13-7	Label	CRW1343
	13-8	Passport	CRY1013
*	13-9	Warranty Card	CRY1087

● Owner's Manual, Installation Manual

Model	Part No.	Language
MEH-P5000RII/EW	CRD3033	English, Spanish
	CRD3034	German, French
	CRD3035	Italian, Dutch
	CRD3036	English, Spanish, German, French, Italian, Dutch

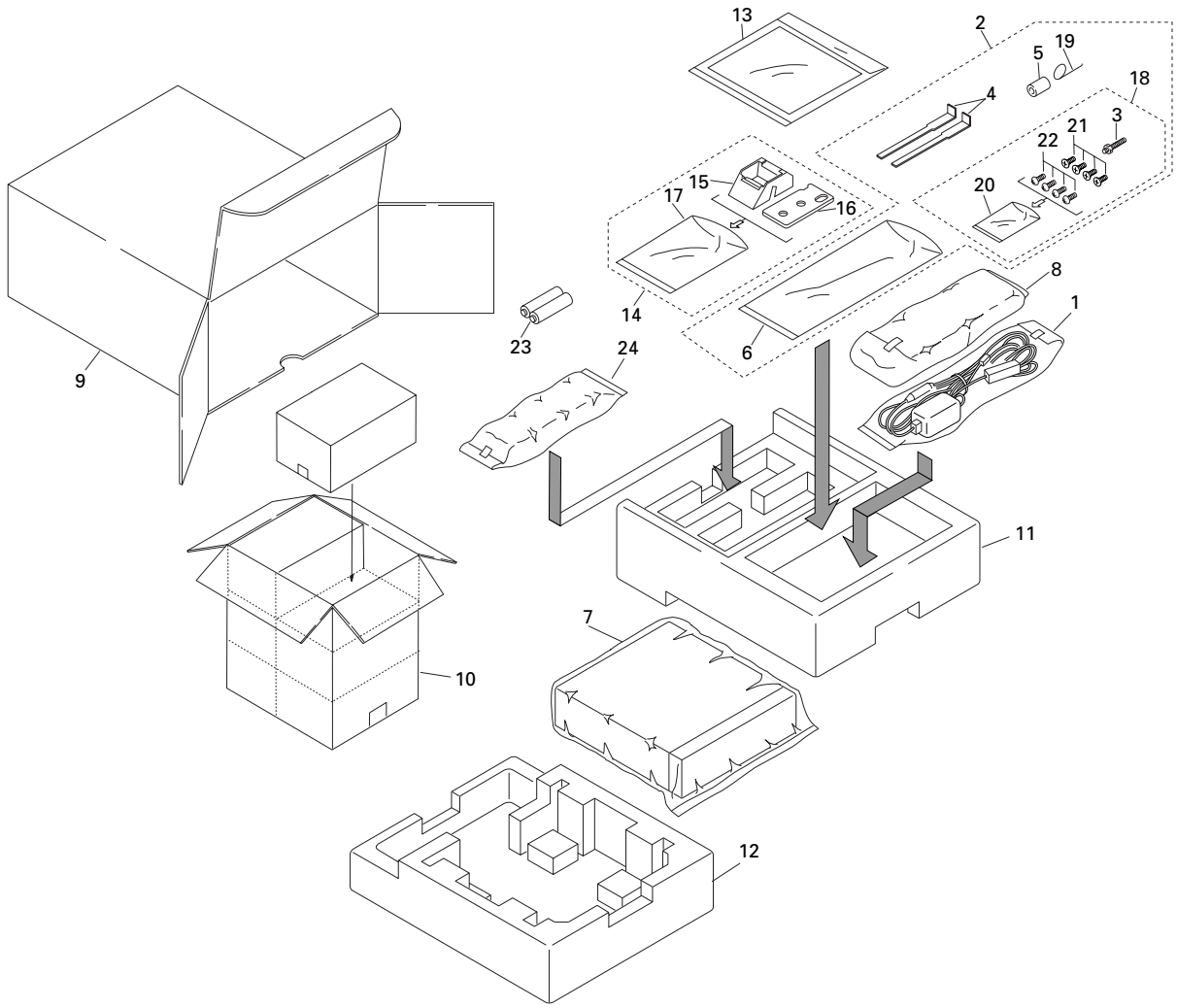
2.2 PACKING(MEH-P5000/UC)



● PACKING SECTION PARTS LIST

Mark	No.	Description	Part No.
	1	Cord Assy	CDE5723
	2	Accessory Assy	CEA1918
	3	Screw	CBA1284
	4	Handle	CNC5395
	5	Bush	CNV1009
*	6	Polyethylene Bag	CEG-158
	7	Polyethylene Bag	CEG1173
	8	Case Assy	CXB3520
	9	Carton	CHG3817
	10	Contain Box	CHL3817
	11	Protector	CHP2098
	12	Protector	CHP2099
*	13-1	Card	ARY1048
	13-2	Polyethylene Bag	CEG1116
	13-3	Owner's Manual (English, French)	CRD2945
	13-4	Installation Manual (English, French)	CRD2946
*	13-5	Label	CRW1343
*	13-6	Caution Card	CRP1206
	14	Base Assy	CEA2426
*	15	Base	CNS5031
*	16	Sheet	CZA3371
	17	Polyethylene Bag	CZE3188
	18	Screw Assy	CEA1924
	19	Screw	CBA-102
*	20	Polyethylene Sheet	CNM4338
	21	Screw	CRZ50P090FMC
	22	Nut	NF50FMC
	23	Screw	TRZ50P080FMC
	24	Strap	CNF-111
	25	Spring	CBH-865
	26	Battery	CEX1006
	27	Remote Control Assy	CXB3875

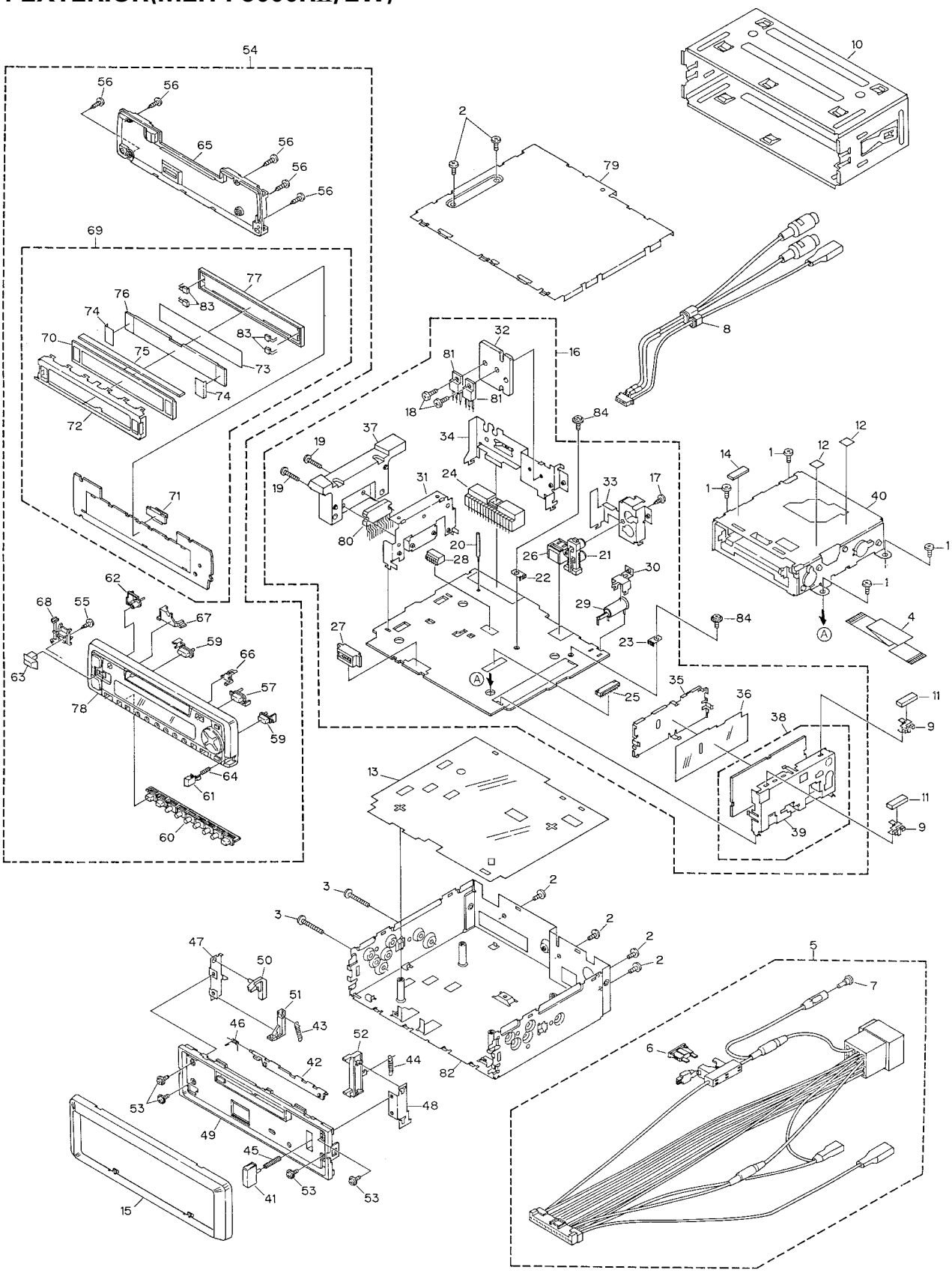
2.3 PACKING(MEH-P5050/ES)



● PACKING SECTION PARTS LIST

Mark	No.	Description	Part No.
	1	Cord Assy	CDE5723
	2	Accessory Assy	CEA2002
	3	Screw	CBA1284
	4	Handle	CNC5395
	5	Bush	CNV1009
*	6	Polyethylene Bag	CEG-158
	7	Polyethylene Bag	CEG-162
	8	Case Assy	CXB3520
	9	Carton	CHG3818
	10	Contain Box	CHL3818
	11	Protector	CHP2098
	12	Protector	CHP2099
	13-1	Polyethylene Bag	CEG1116
	13-2	Owner's Manual (English, Spanish)	CRD2740
	13-2	Owner's Manual (Portuguese(B), Arabic)	CRD2741
	13-4	Installation Manual (English, Spanish, Portuguese(B), Arabic)	CRD2742
*	13-5	Caution Card	CRP1206
	14	Base Assy	CEA2426
*	15	Base	CNS5031
*	16	Sheet	CZA3371
	17	Polyethylene Bag	CZE3188
	18	Screw Assy	CEA2003
	19	Spring	CBH-865
*	20	Polyethylene Bag	CEG-127
	21	Screw	CRZ50P090FMC
	22	Screw	TRZ50P080FMC
	23	Battery	CEX1006
	24	Remote Control Assy	CXB3875

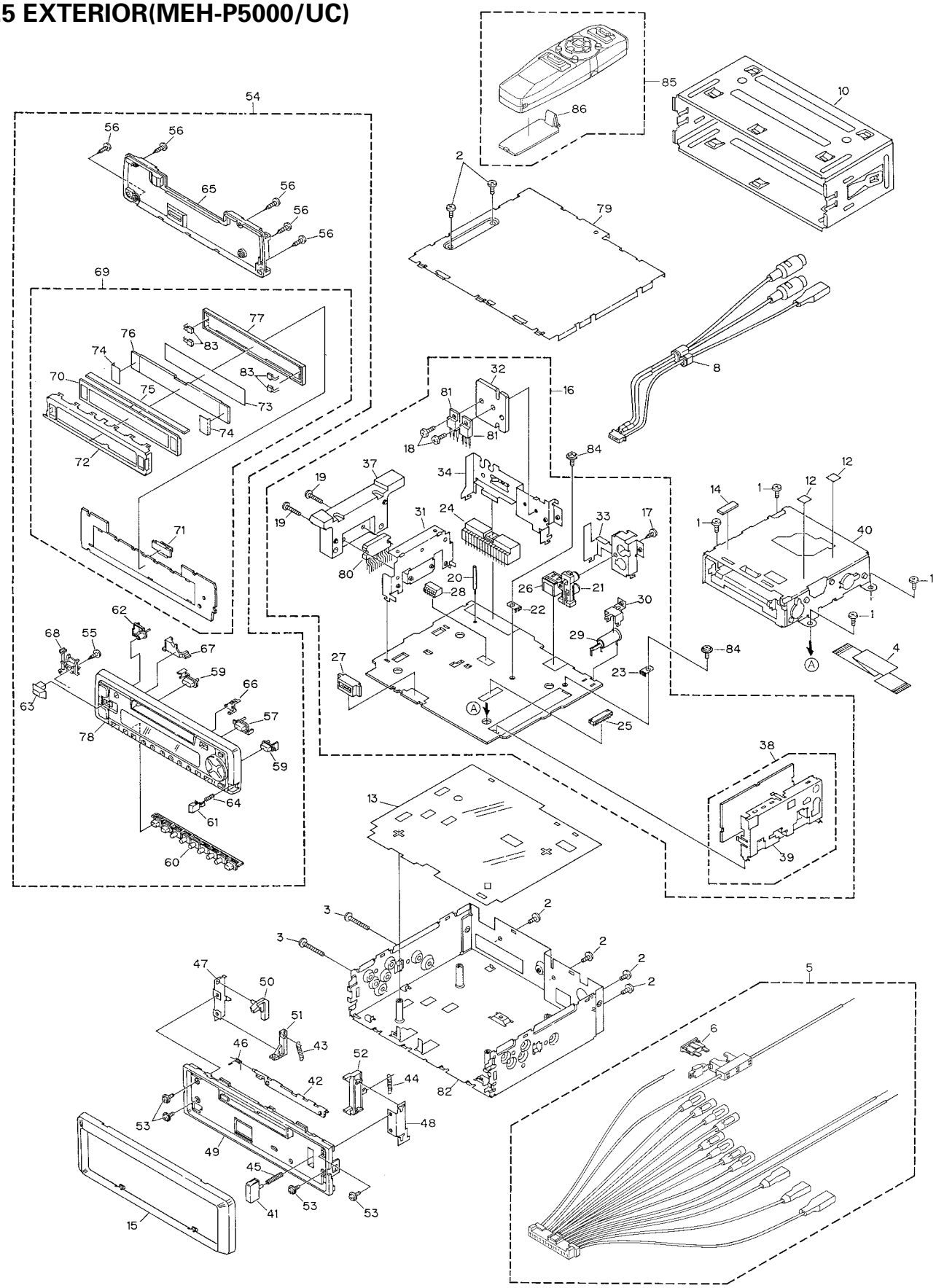
2.4 EXTERIOR(MEH-P5000RII/EW)



● EXTERIOR SECTION PARTS LIST

Mark	No.	Description	Part No.
	1	Screw	BSZ26P050FMC
	2	Screw	BSZ30P060FMC
	3	Screw	BSZ30P200FMC
	4	Connector	CDE5718
	5	Cord Assy	CDE5722
	6	Fuse(10A)	CEK1136
	7	Terminal Cover	CKX-003
	8	Cord Assy	CDE5804
	9	Holder	CNC5704
	10	Holder	CNC6798
	11	Cushion	CNM4870
	12	Insulator	CNM5752
	13	Insulator	CNM5921
	14	Cushion	CNM5925
	15	Panel	CNS5097
	16	Tuner Amp Unit	CWM6570
	17	Screw	BPZ26P080FMC
	18	Screw	BSZ26P100FMC
	19	Screw	BSZ26P160FMC
	20	Clamper	CEF1005
	21	Pin Jack(CN452)	CKB1028
	22	Terminal(CN303)	CKF1059
	23	Terminal(CN351)	CKF1059
	24	Plug(CN501)	CKM1231
*	25	Connector(CN201)	CKS2221
	26	Connector(CN751)	CKS3408
	27	Connector(CN801)	CKS3581
	28	Connector(CN451)	CKS3599
	29	Antenna Jack(CN302)	CKX1056
	30	Holder	CNC4569
	31	Holder	CNC6361
	32	Heat Sink	CNC7369
	33	Holder	CNC7370
	34	Holder	CNC7968
	35	Holder	CNC8021
	36	Insulator	CNM4684
	37	Heat Sink	CNR1419
	38	FM/AM Tuner Unit	CWE1416
	39	Holder	CNC6555
	40	MD Mechanism Module	CXB3584
	41	Button	CAC5180
	42	Door	CAT1983
	43	Spring	CBH1834
	44	Spring	CBH1835
	45	Spring	CBH1996
	46	Spring	CBH2191
	47	Bracket	CNC6135
	48	Bracket	CNC6791
	49	Panel	CNS5096
	50	Arm	CNV4692
	51	Arm	CNV4693
	52	Arm	CNV4951
	53	Screw	IMS20P030FZK
	54	Detach Grille Assy	CXB4293
	55	Screw	BPZ20P080FMC
	56	Screw	BPZ20P080FZK
	57	Button(EJECT)	CAC5768
	58	Button(SOURCE)	CAC5769
	59	Button(BAND)	CAC5770
	60	Button(1-6)	CAC5771
	61	Button	CAC5772
	62	Button(D.RESET)	CAC5773
	63	Button(EQ)	CAC5774
	64	Spring	CBH2190
	65	Cover	CNS5094
	66	Lighting Conductor	CNV5505
	67	Lighting Conductor	CNV5506
	68	Holder	CNV5511
	69	Keyboard Unit	CWM6041
	70	LCD	CAW1490
	71	Connector(CN901)	CKS3580
	72	Holder	CNC7969
	73	Sheet	CNM5923
	74	Sheet	CNM5924
	75	Connector	CNV5504
	76	Lighting Conductor	CNV5507
	77	Housing	CNV5508
	78	Grille Unit	CXB4294
	79	Case Unit	CXB4190
	80	IC(IC501)	PAL005A
	81	Transistor(Q201,952)	2SD2396
	82	Chassis Unit	CXB2971
	83	LED(D903,904,907,908)	NSPWF50BS-8452
	84	Screw	ISS26P055FUC
	85	Case Assy	CXB3520

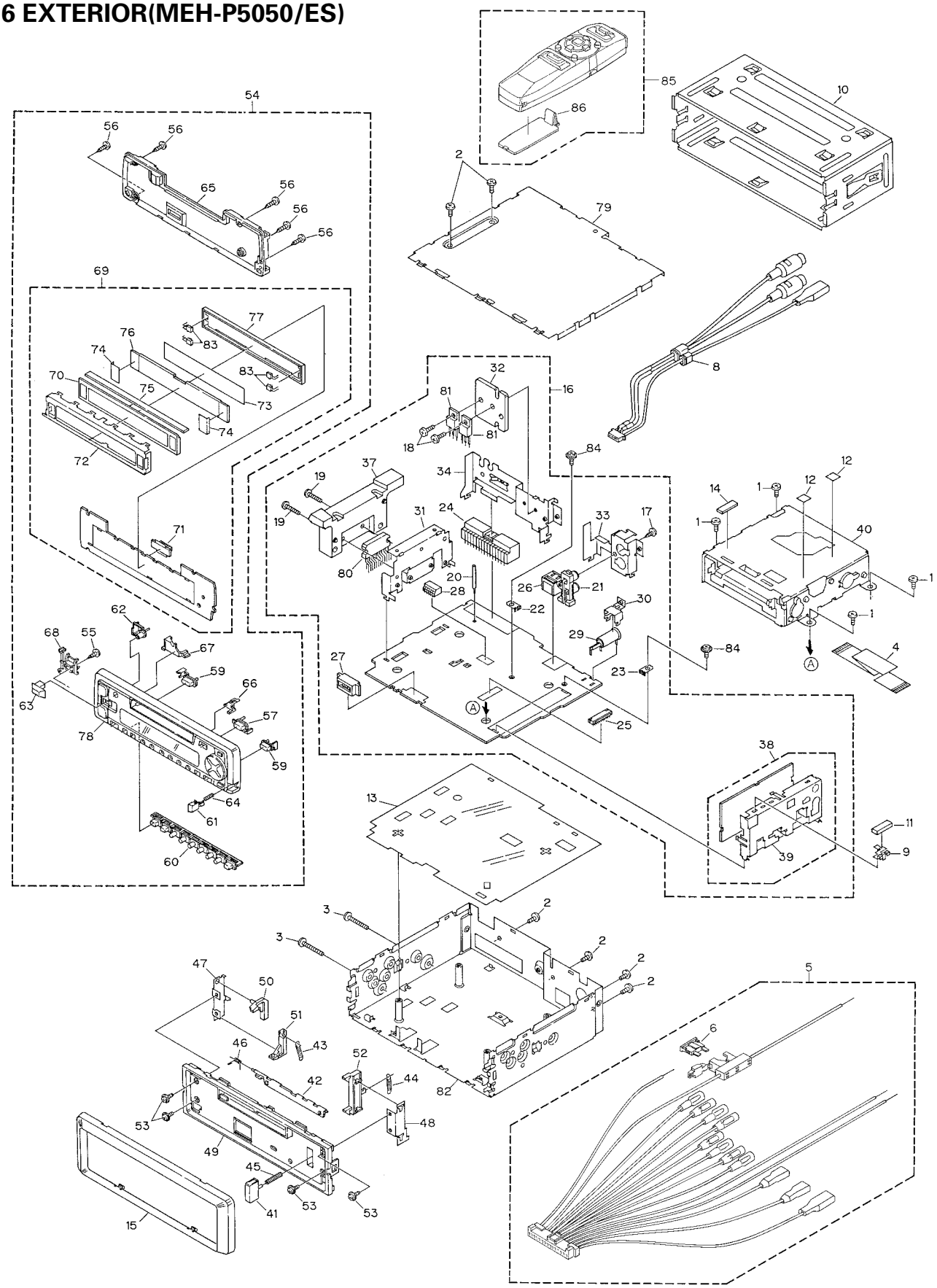
2.5 EXTERIOR(MEH-P5000/UC)



● EXTERIOR SECTION PARTS LIST

Mark	No.	Description	Part No.
	1	Screw	BSZ26P050FMC
	2	Screw	BSZ30P060FMC
	3	Screw	BSZ30P200FMC
	4	Connector	CDE5718
	5	Cord Assy	CDE5723
	6	Fuse(10A)	CEK1136
	7	Terminal Cover	CKX-003
	8	Cord Assy	CDE5804
	9	•••••	
	10	Holder	CNC6798
	11	•••••	
	12	Insulator	CNM5752
	13	Insulator	CNM5921
	14	Cushion	CNM5925
	15	Panel	CNS5097
	16	Tuner Amp Unit	CWM6066
	17	Screw	BPZ26P080FMC
	18	Screw	BSZ26P100FMC
	19	Screw	BSZ26P160FMC
	20	Clamper	CEF1005
	21	Pin Jack(CN452)	CKB1028
	22	Terminal(CN303)	CKF1059
	23	Terminal(CN351)	CKF1059
	24	Plug(CN501)	CKM1231
*	25	Connector(CN201)	CKS2221
	26	Connector(CN751)	CKS3408
	27	Connector(CN801)	CKS3581
	28	Connector(CN451)	CKS3599
	29	Antenna Jack(CN302)	CKX1056
	30	Holder	CNC4569
	31	Holder	CNC6361
	32	Heat Sink	CNC7369
	33	Holder	CNC7370
	34	Holder	CNC7968
	35	•••••	
	36	•••••	
	37	Heat Sink	CNR1419
	38	FM/AM Tuner Unit	CWE1417
	39	Holder	CNC6555
	40	MD Mechanism Module	CXB3584
	41	Button	CAC5180
	42	Door	CAT1984
	43	Spring	CBH1834
	44	Spring	CBH1835
	45	Spring	CBH1996
	46	Spring	CBH2191
	47	Bracket	CNC6135
	48	Bracket	CNC6791
	49	Panel	CNS5096
	50	Arm	CNV4692
	51	Arm	CNV4693
	52	Arm	CNV4951
	53	Screw	IMS20P030FZK
	54	Detach Grille Assy	CXB3046
	55	Screw	BPZ20P080FMC
	56	Screw	BPZ20P080FZK
	57	Button(EJECT)	CAC5768
	58	Button(SOURCE)	CAC5769
	59	Button(BAND)	CAC5770
	60	Button(1-6)	CAC5775
	61	Button	CAC5772
	62	Button(D.RESET)	CAC5773
	63	Button(EQ)	CAC5774
	64	Spring	CBH2190
	65	Cover	CNS5094
	66	Lighting Conductor	CNV5505
	67	Lighting Conductor	CNV5506
	68	Holder	CNV5511
	69	Keyboard Unit	CWM6067
	70	LCD	CAW1491
	71	Connector(CN901)	CKS3580
	72	Holder	CNC7969
	73	Sheet	CNM5923
	74	Sheet	CNM5924
	75	Connector	CNV5504
	76	Lighting Conductor	CNV5507
	77	Housing	CNV5508
	78	Grille Unit	CXB2982
	79	Case Unit	CXB4190
	80	IC(IC501)	PAL005A
	81	Transistor(Q201,952)	2SD2396
	82	Chassis Unit	CXB2973
	83	LED(D903,904,907,908)	NSPWF50BS-8452
	84	Screw	ISS26P055FUC
	85	Remote Control Assy	CXB3875
	86	Battery Cover	CNS5032

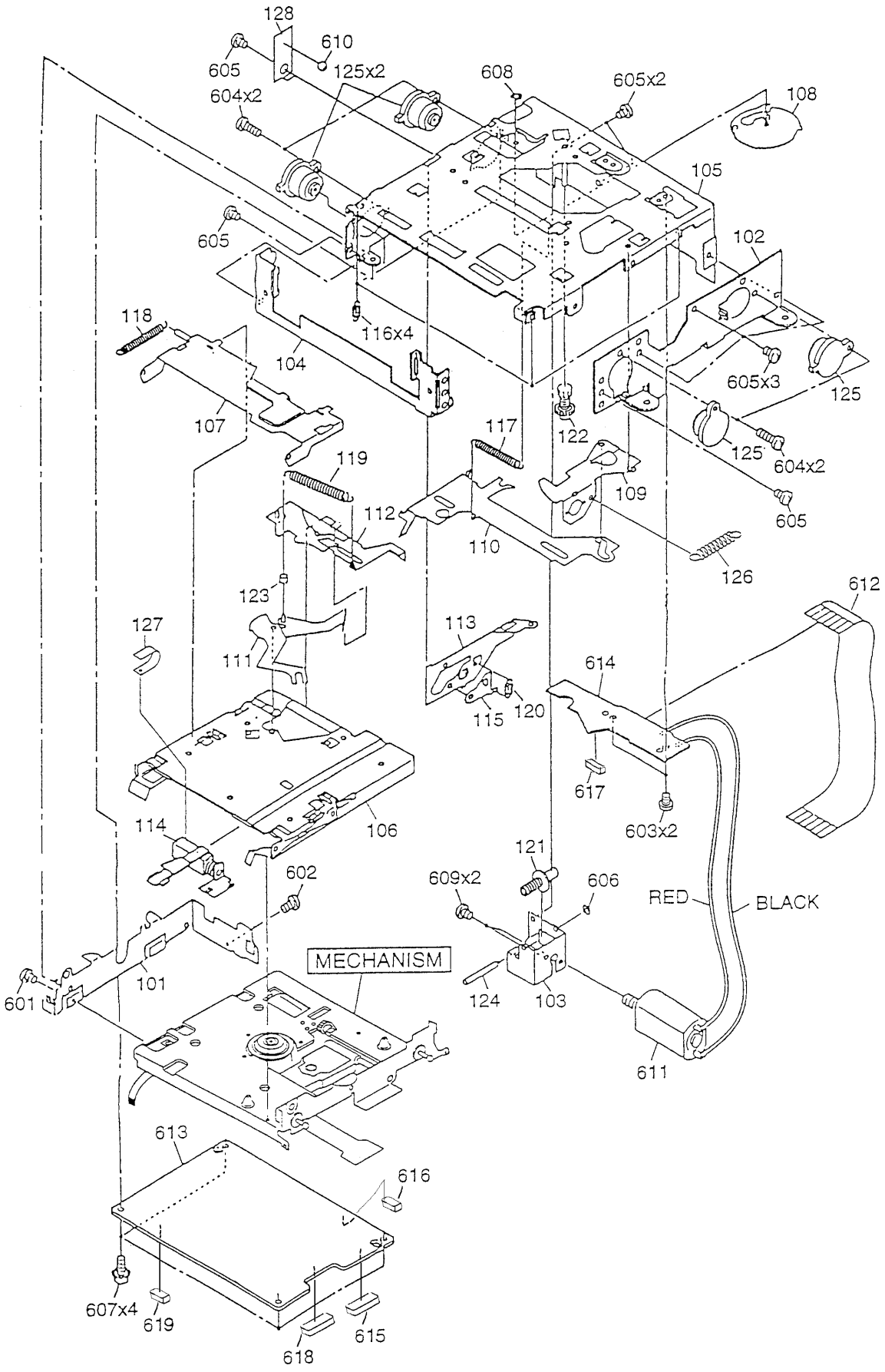
2.6 EXTERIOR(MEH-P5050/ES)



● EXTERIOR SECTION PARTS LIST

Mark	No.	Description	Part No.
	1	Screw	BSZ26P050FMC
	2	Screw	BSZ30P060FMC
	3	Screw	BSZ30P200FMC
	4	Connector	CDE5718
	5	Cord Assy	CDE5723
	6	Fuse(10A)	CEK1136
	7	Terminal Cover	CKX-003
	8	Cord Assy	CDE5804
	9	Holder	CNC5704
	10	Holder	CNC6798
	11	Cushion	CNM4870
	12	Insulator	CNM5752
	13	Insulator	CNM5921
	14	Cushion	CNM5925
	15	Panel	CNS5097
	16	Tuner Amp Unit	CWM6038
	17	Screw	BPZ26P080FMC
	18	Screw	BSZ26P100FMC
	19	Screw	BSZ26P160FMC
	20	Clamper	CEF1005
	21	Pin Jack(CN452)	CKB1028
	22	Terminal(CN303)	CKF1059
	23	Terminal(CN351)	CKF1059
	24	Plug(CN501)	CKM1231
*	25	Connector(CN201)	CKS2221
	26	Connector(CN751)	CKS3408
	27	Connector(CN801)	CKS3581
	28	Connector(CN451)	CKS3599
	29	Antenna Jack(CN302)	CKX1056
	30	Holder	CNC4569
	31	Holder	CNC6361
	32	Heat Sink	CNC7369
	33	Holder	CNC7370
	34	Holder	CNC7968
	35	•••••	
	36	•••••	
	37	Heat Sink	CNR1419
	38	FM/AM Tuner Unit	CWE1485
	39	Holder	CNC6555
	40	MD Mechanism Module	CXB3584
	41	Button	CAC5180
	42	Door	CAT1984
	43	Spring	CBH1834
	44	Spring	CBH1835
	45	Spring	CBH1996
	46	Spring	CBH2191
	47	Bracket	CNC6135
	48	Bracket	CNC6791
	49	Panel	CNS5096
	50	Arm	CNV4692
	51	Arm	CNV4693
	52	Arm	CNV4951
	53	Screw	IMS20P030FZK
	54	Detach Grille Assy	CXB2916
	55	Screw	BPZ20P080FMC
	56	Screw	BPZ20P080FZK
	57	Button(EJECT)	CAC5768
	58	Button(SOURCE)	CAC5769
	59	Button(BAND)	CAC5770
	60	Button(1-6)	CAC5775
	61	Button	CAC5772
	62	Button(D.RESET)	CAC5773
	63	Button(EQ)	CAC5774
	64	Spring	CBH2190
	65	Cover	CNS5094
	66	Lighting Conductor	CNV5505
	67	Lighting Conductor	CNV5506
	68	Holder	CNV5511
	69	Keyboard Unit	CWM6042
	70	LCD	CAW1491
	71	Connector(CN901)	CKS3580
	72	Holder	CNC7969
	73	Sheet	CNM5923
	74	Sheet	CNM5924
	75	Connector	CNV5504
	76	Lighting Conductor	CNV5507
	77	Housing	CNV5508
	78	Grille Unit	CXB2977
	79	Case Unit	CXB4190
	80	IC(IC501)	PAL005A
	81	Transistor(Q201,952)	2SD2396
	82	Chassis Unit	CXB2973
	83	LED(D903,904,907,908)	NSPWF50BS-8452
	84	Screw	ISS26P055FUC
	85	Remote Control Assy	CXB3875
	86	Battery Cover	CNS5032

2.7 MD MECHANISM MODULE(1)

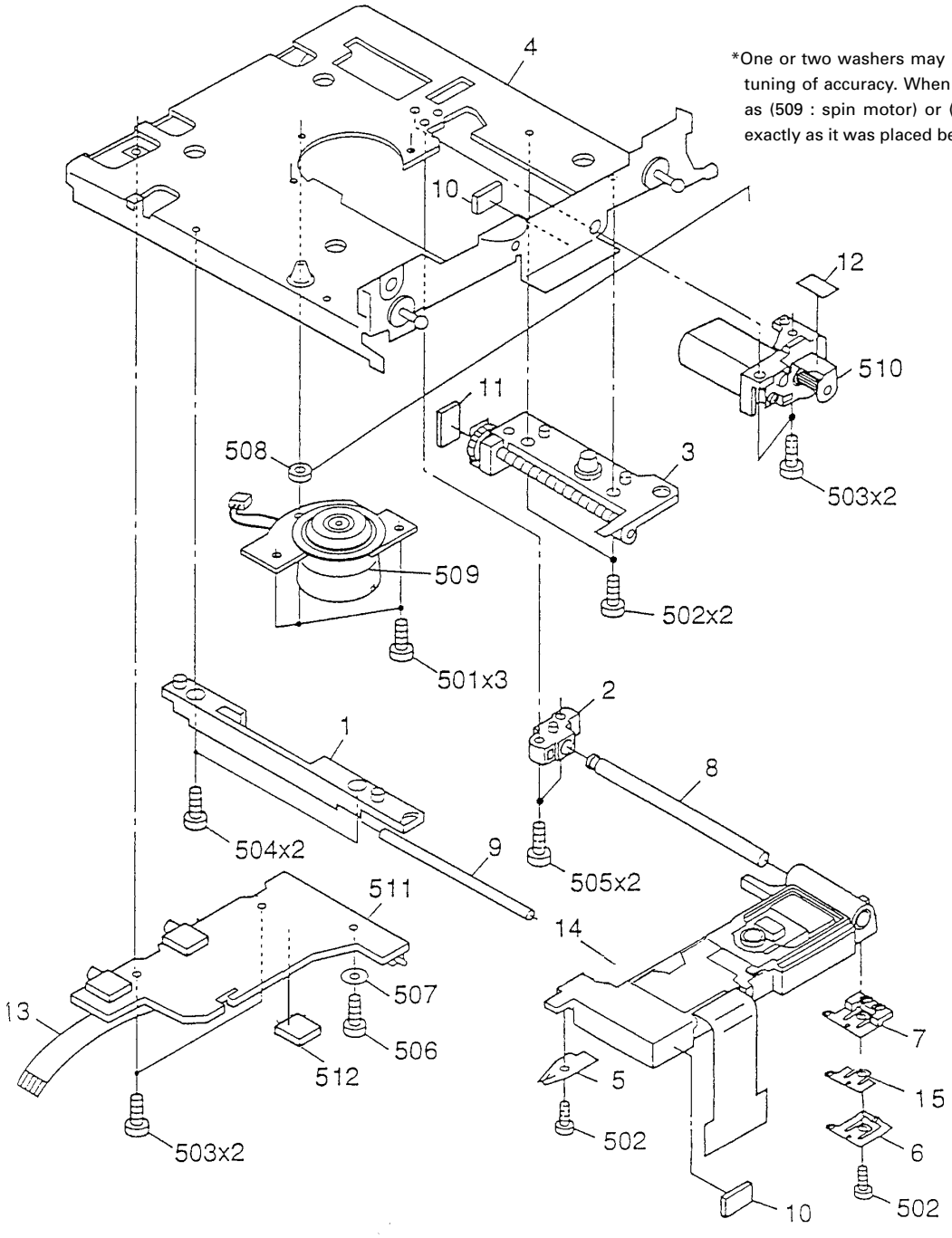


● MD MECHANISM MODULE(1) SECTION PARTS LIST

Mark No.	Description	Part No.
1-100	•••••	
101	Side Plate Assy, Left	1242000186
102	Side Bracket	1242000188
103	Loading Motor Bracket	1242000189
104	Front Guide	1242000190
105	Loading Chassis Assy	1242070066
106	Disc Holder Assy	1242140176
107	Disc Holder Arm	1242400018
108	Mode Gear	1242410003
109	FLT Lock Arm	1242480151
110	FLT Lock Plate	1242480112
111	Clamper Arm	1242480114
112	Loading Plate	1242480105
113	Mode Plate	1242480107
114	Catch Block	1242480108
115	Lift Arm	1242500001
116	Spring, Damper	1242580146
117	Spring, FLT Lock	1242580147
118	Spring, Disk Holder	1242580148
119	Spring, Clamper Arm	1242580149
120	Spring, Lift Arm	1242580150
121	Gear, Worm Wheel	1242810060
122	Gear, Pinion	1242810061
123	Roller, Clamper Arm	1242870012
124	Shaft, Worm Wheel	1242900093
125	Oil Damper	1243300001
126	Spring, FLT Lock Arm	1242580204
127	Spring, Slider	1242580201
128	Spring, Mode Plate	1242580202
129-600	•••••	

Mark No.	Description	Part No.
601	Screw,1.7X1.6MM	1249700045
602	Screw,1.7X2.5MM	1249700040
603	Screw,2.0X3.0MM	1249700133
604	Screw,2.0X3.5MM	1249700134
605	Screw,2.0X2.2MM	1249700135
606	Washer,1.2X3X0.2MM	1249900021
607	Screw,2.0X4.0MM	1249700140
608	Washer	YE15FUC
609	Screw,2.0X2.5MM	1249700158
610	Ball	CNR1189
611	Loading Motor(M651)	1246300043
612	Flat Cable, 8 Pin	1245120221
613	Main PCB	1246840289
614	Switch PCB	1246840145
615	Connector(CN301)	CKS2417
616	Connector(CN651)	CKS1946
617	Connector(CN652)	CKS2407
618	Socket(CN101)	1245100201
619	Socket(CN601)	1245100039

2.8 MD MECHANISM MODULE(2)



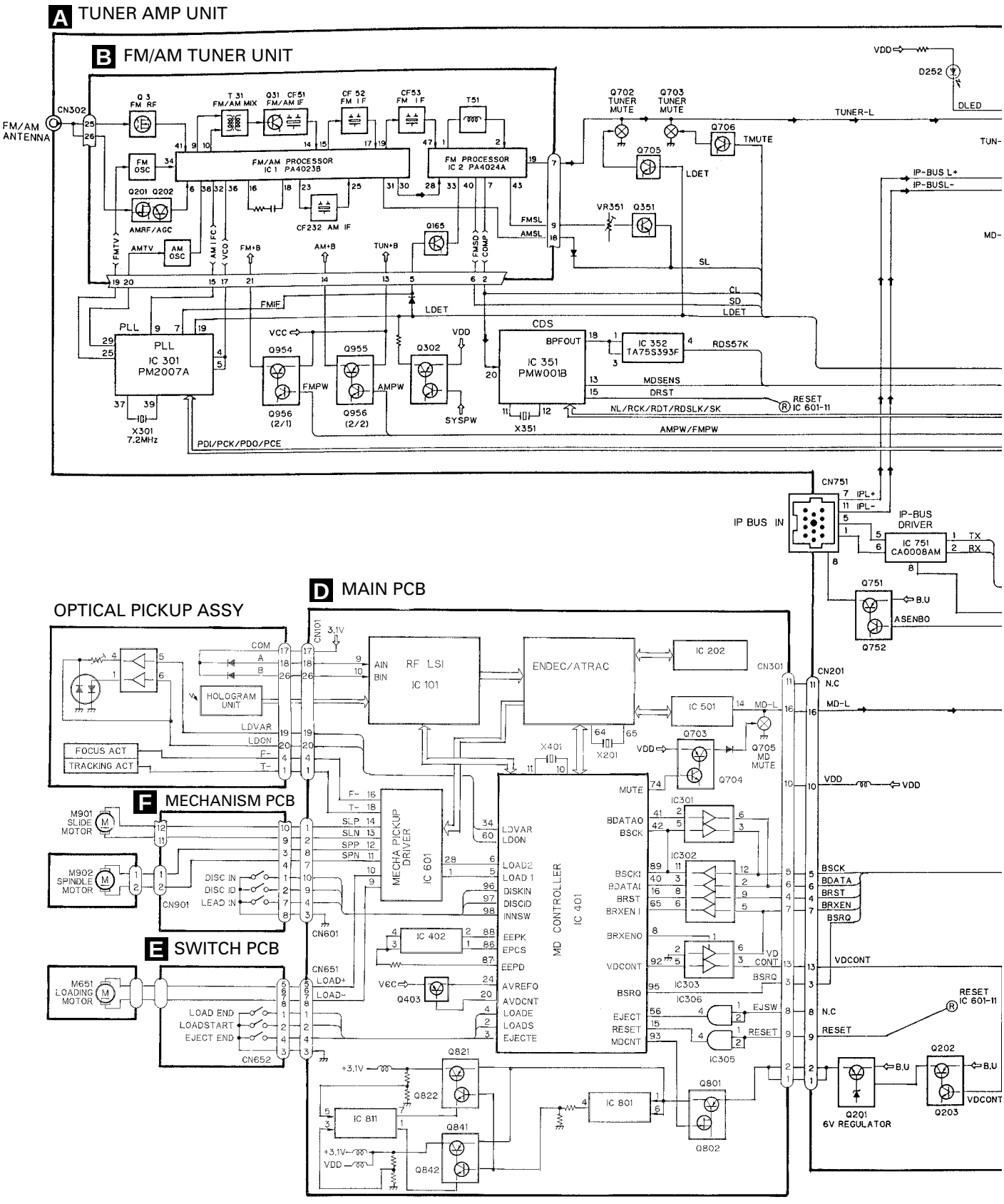
*One or two washers may be added to the parts for fine tuning of accuracy. When you exchange the parts such as (509 : spin motor) or (508: motor spacer), mount it exactly as it was placed before the exchange.

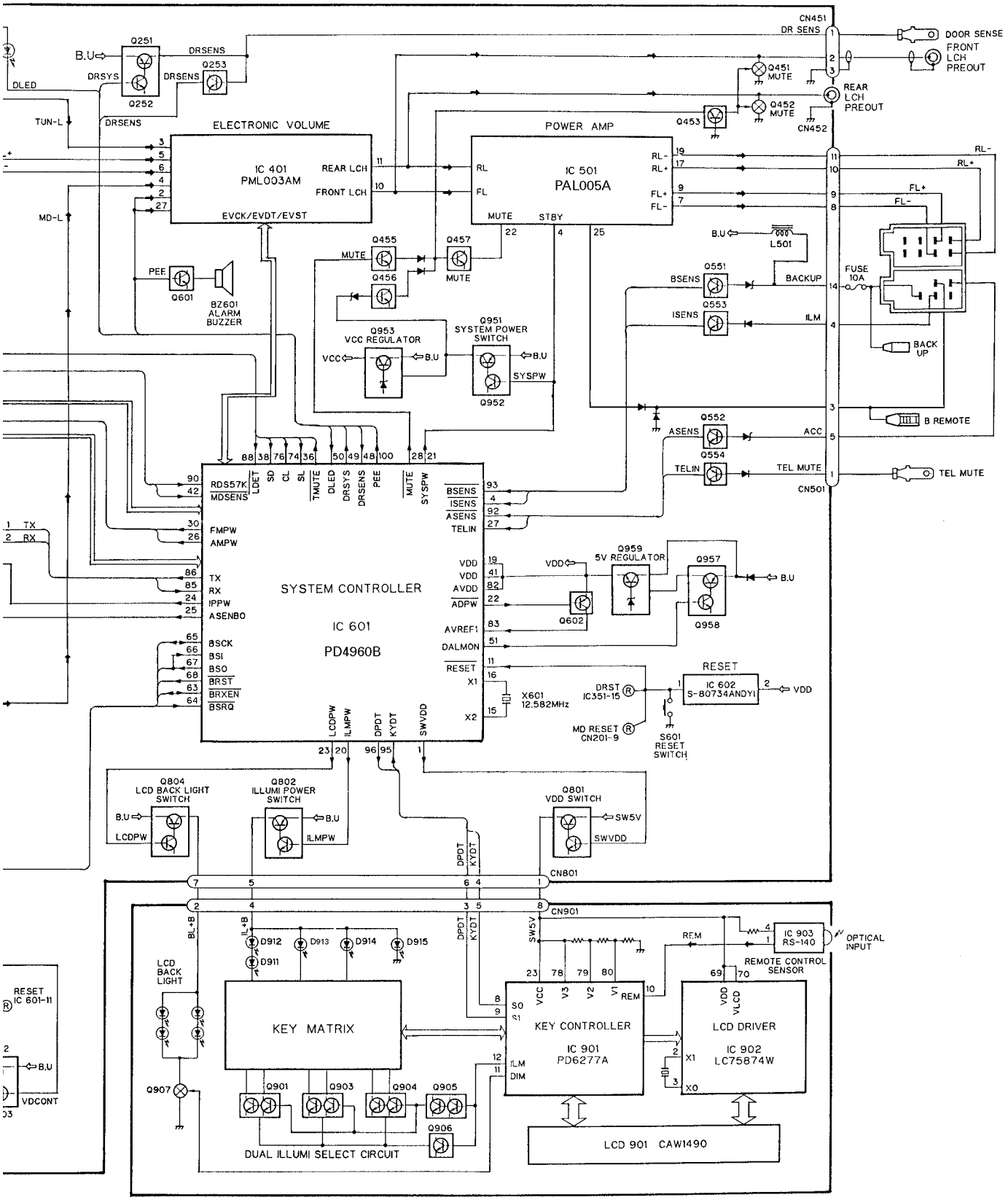
● MD MECHANISM MODULE(2) SECTION PARTS LIST

Mark No.	Description	Part No.
1	Holder Shaft Plate	1242000279
2	Shaft Guide Holder	1242000064
3	Drive Screw Assy Unit	1242000346
4	Main Chassis Assy	1242070065
5	Shaft Catch Spring	1242580007
6	Clip Spring	1242580067
7	Grip Rack	1242810021
8	Pickup Slide Shaft	1242900127
9	Slide Shaft(S)	1242900011
10	Mechanism Cushion	1243260122
11	Spring Cushion	1243260031
12	Spacer(C)	1244130006
13	Mechanism Flexible PCB	1245210120
14	Optical Pickup Assy	1246170028
15	Spring B	1242580050
16-500	•••••	
501	Screw,1.4X2MM	1249700203
502	Screw,1.4X2.5MM	1249700007
503	Screw,1.4X2.2MM	1249700011
504	Screw,1.7X4.3MM	1249700055
505	Screw,1.4X4.5MM	1249700033
506	Screw,1.4X2.2MM	1309701315
507	Washer,1.4X0.5MM	1309900937
508	Washer,2.8X3.9X0.05MM	1249900020
509	Spin Motor(M902)	1246300069
510	Slide Motor(M901)	1246300073
511	Mechanism PCB	1246840251
512	Connector(CN901)	1425100236

3. BLOCK DIAGRAM AND SCHEMATIC DIAGRAM

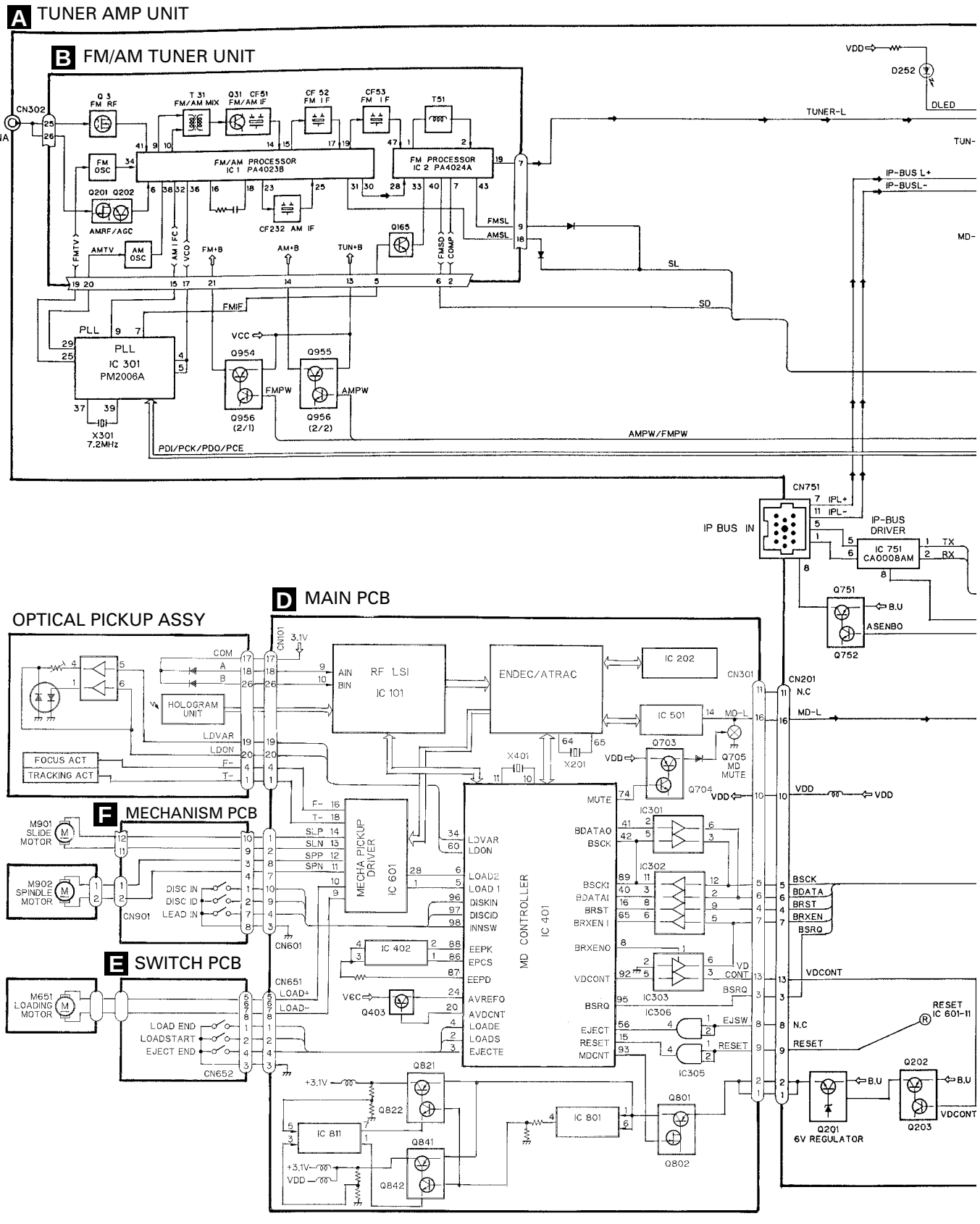
3.1 BLOCK DIAGRAM(MEH-P5000RII/EW)

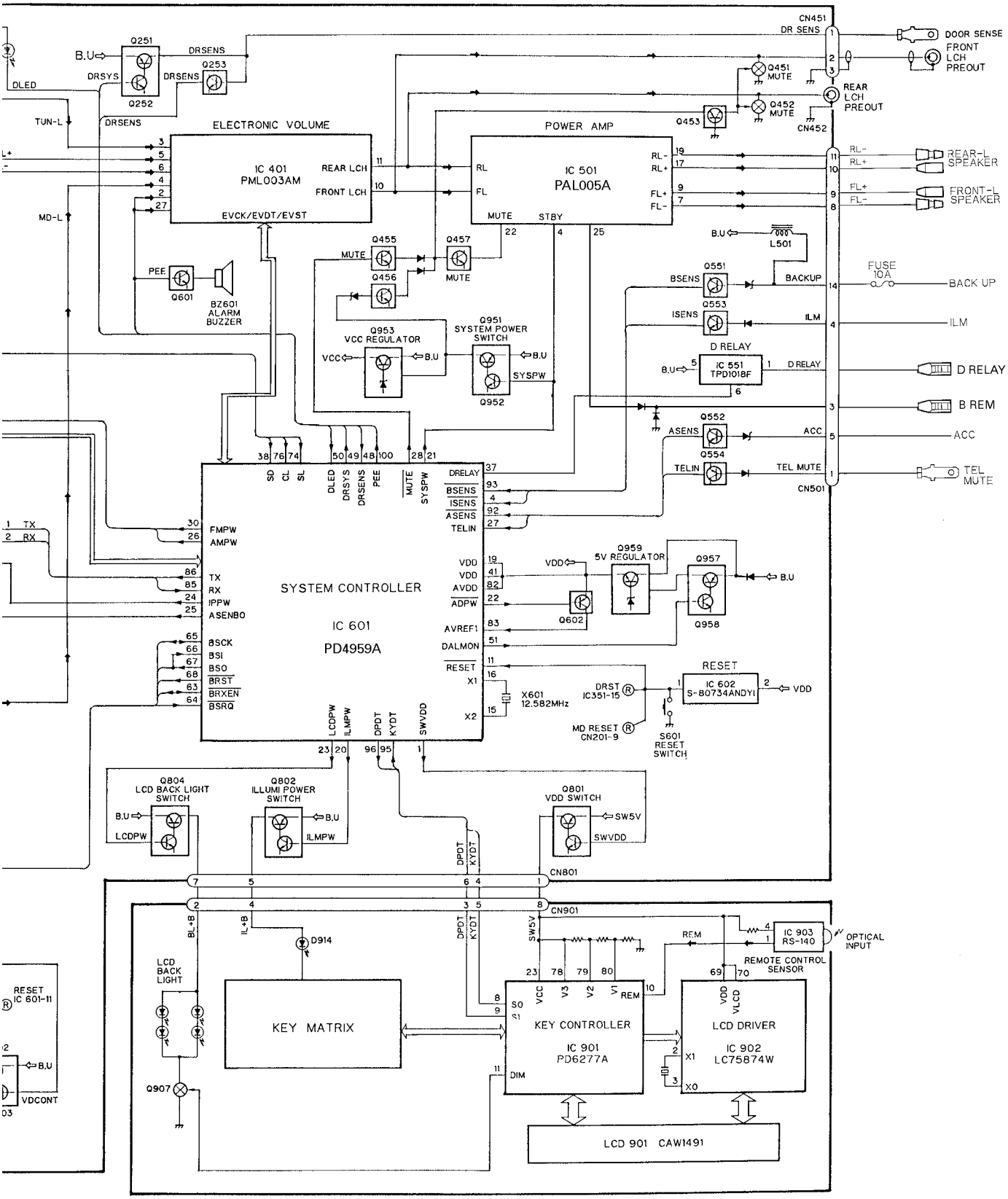




C KEYBOARD UNIT

3.2 BLOCK DIAGRAM(MEH-P5000/UC, MEH-P5050/ES)

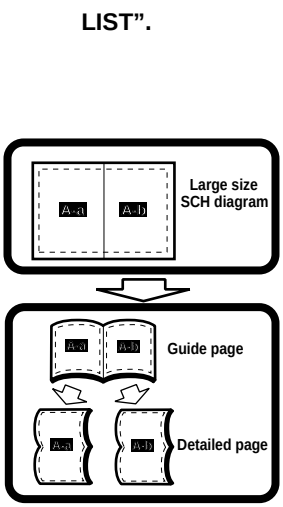


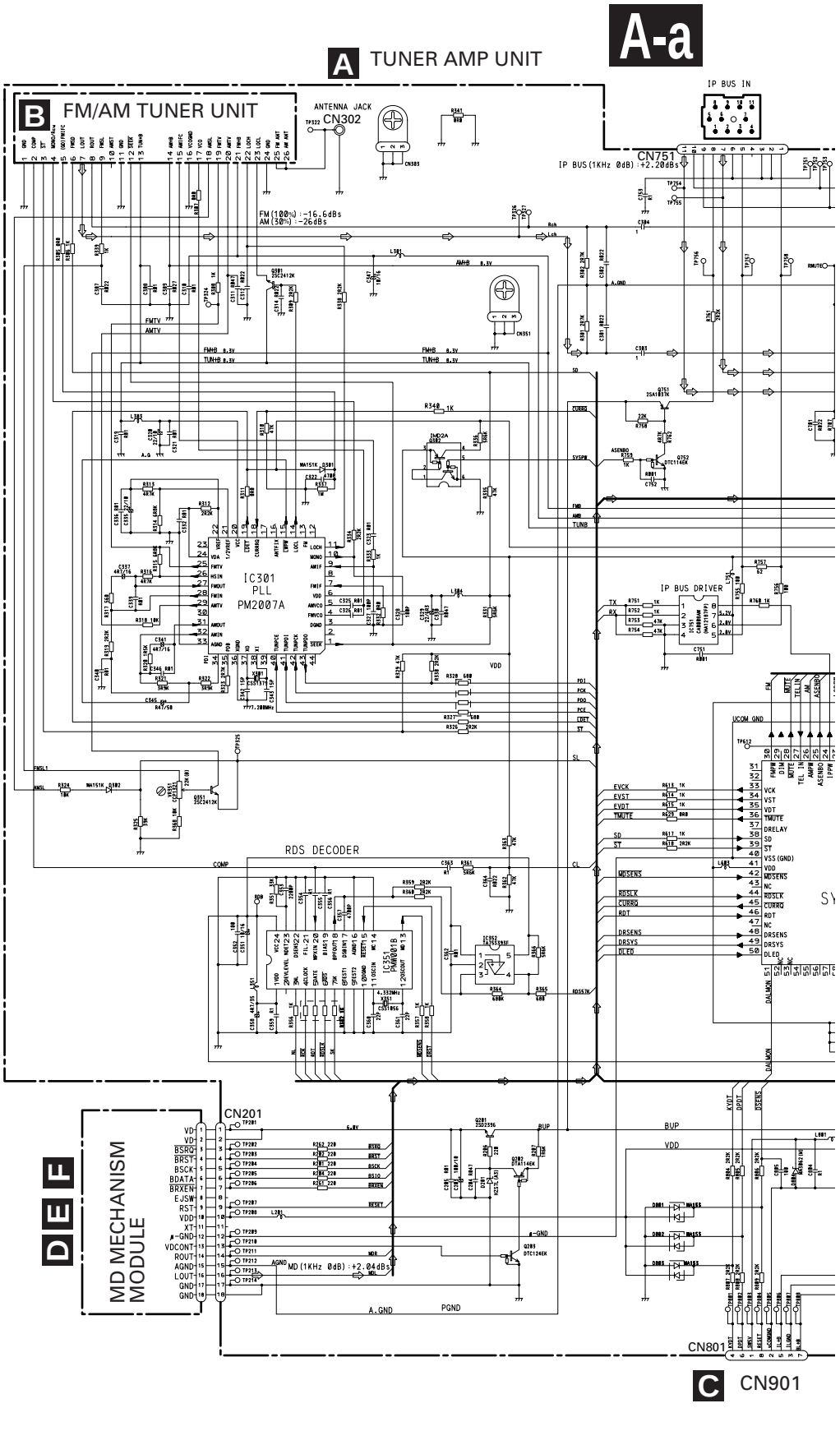


C KEYBOARD UNIT

3.3 OVERALL CONNECTION DIAGRAM(GUIDE PAGE)(MEH-P5000RII/EW)

Note: When ordering service parts, be sure to refer to "EXPLODED VIEWS AND PARTS LIST" or "ELECTRICAL PARTS LIST".



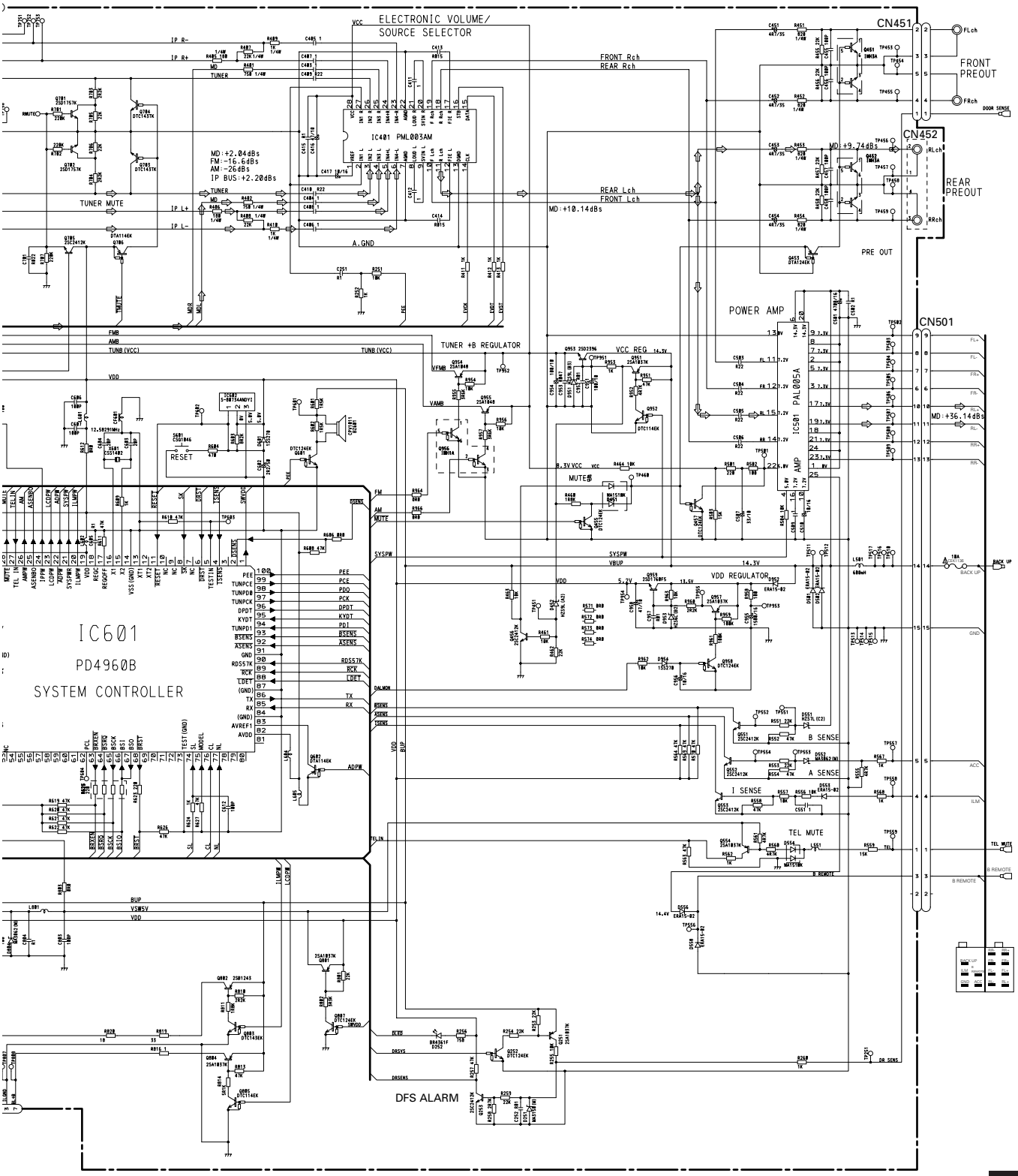


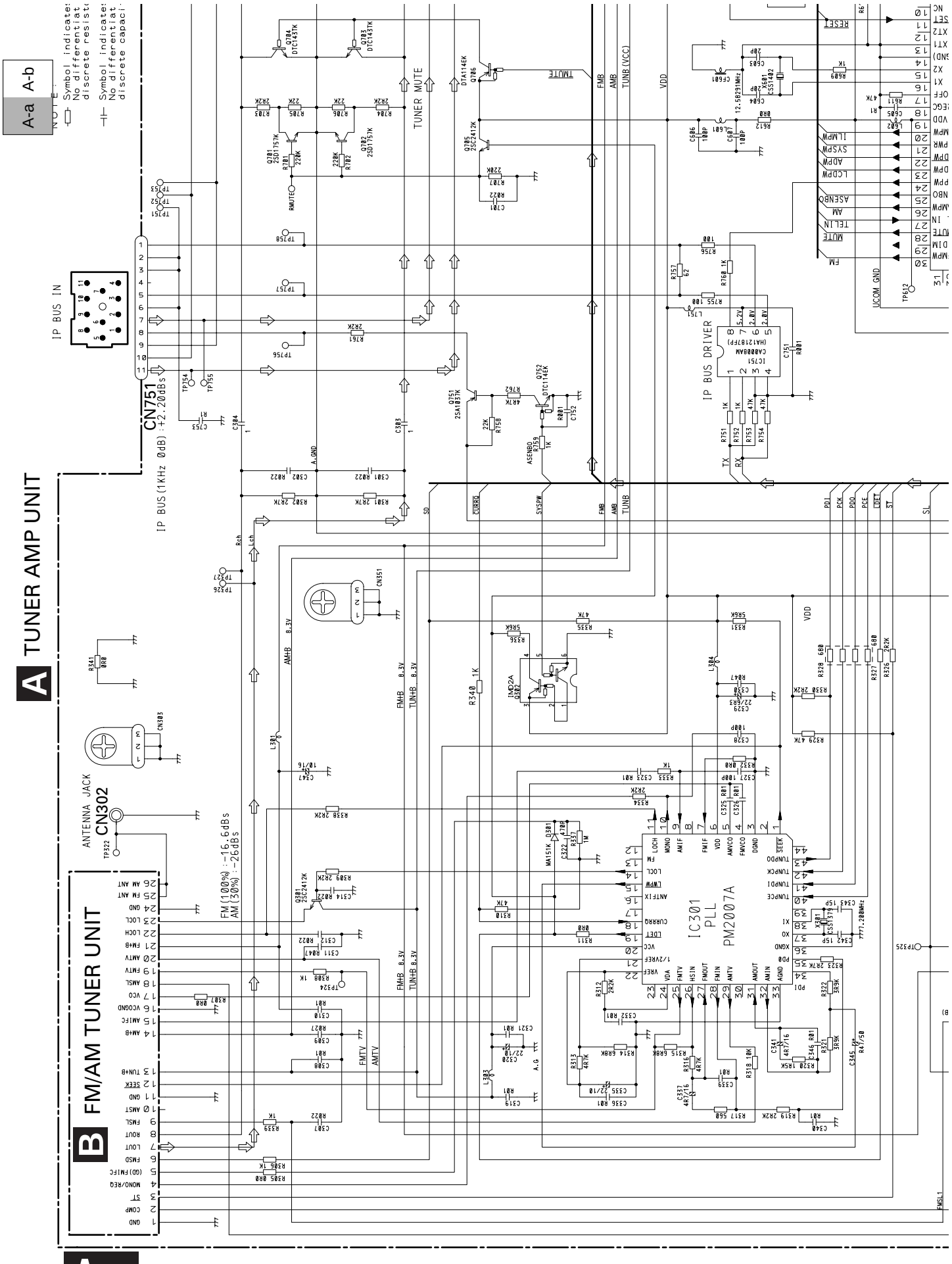
A-b

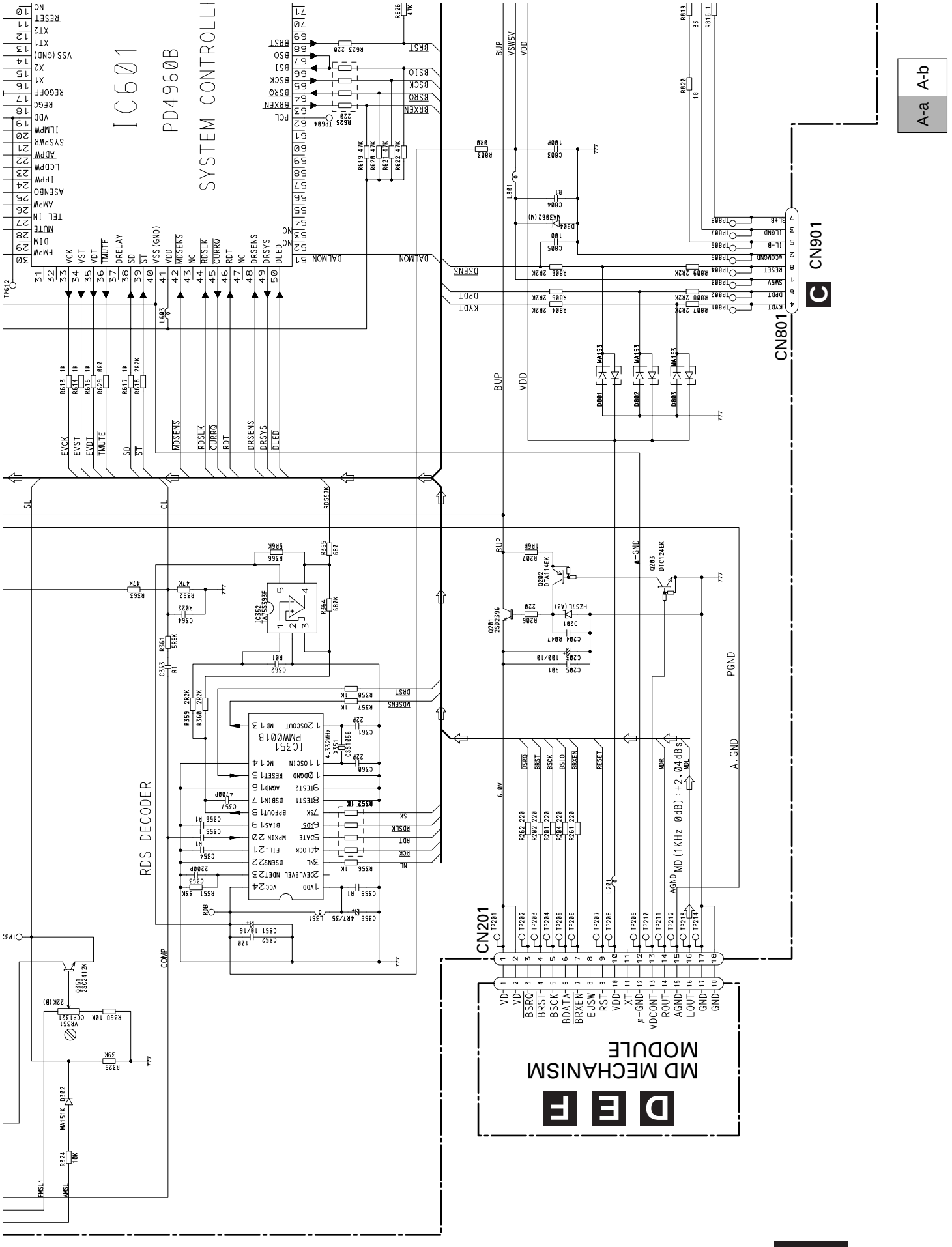
NOTE:
- Symbol indicates a resistor. No differentiation is made between chip resistors and discrete resistors.
- Symbol indicates a capacitor. No differentiation is made between chip capacitors and discrete capacitors.

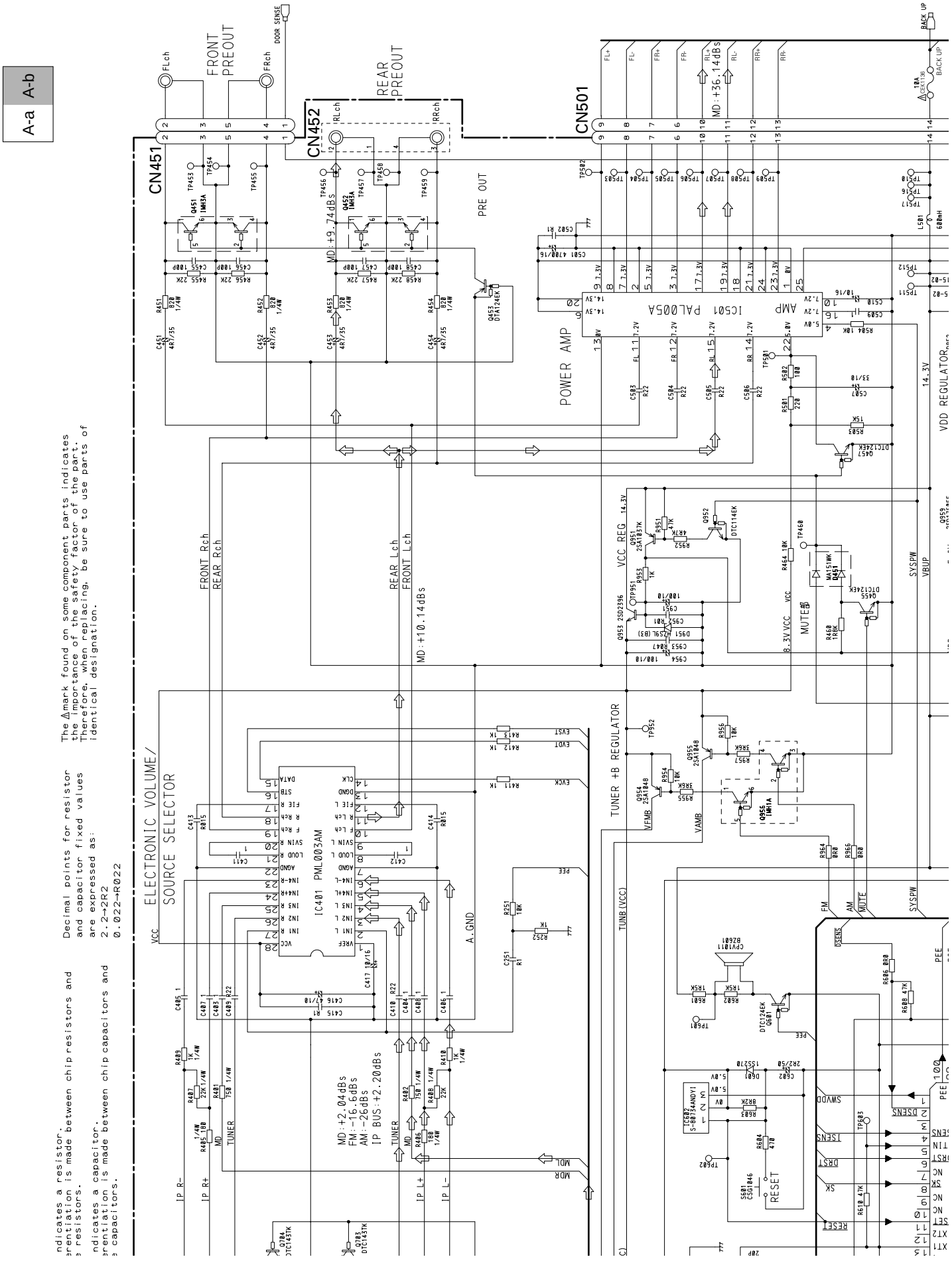
Decimal points for resistor and capacitor fixed values are expressed as:
2.2→2R2
0.022→R022

The ⚠ mark found on some component parts indicates the importance of the safety factor of the part. Therefore, when replacing, be sure to use parts of identical designation.




A-a A-b
NOTE:
Symbol indicates No differentiation discrete resistor
Symbol indicates No differentiation discrete capacitor
A TUNER AMP UNIT
B FM/AM TUNER UNIT
CN751
IP BUS (1KHz 0dB) :+2.20dBs
IP BUS IN
IP BUS DRIVER
IC751
CA0008AW
(HA12187FP)
TUNER MUTE
ANTENNA JACK
CN302
FM (100%) :-16.6dBs
AM (30%) :-26dBs
IC301
PLL
PM2007A
CN351
CN303
UCOM GND
A-a

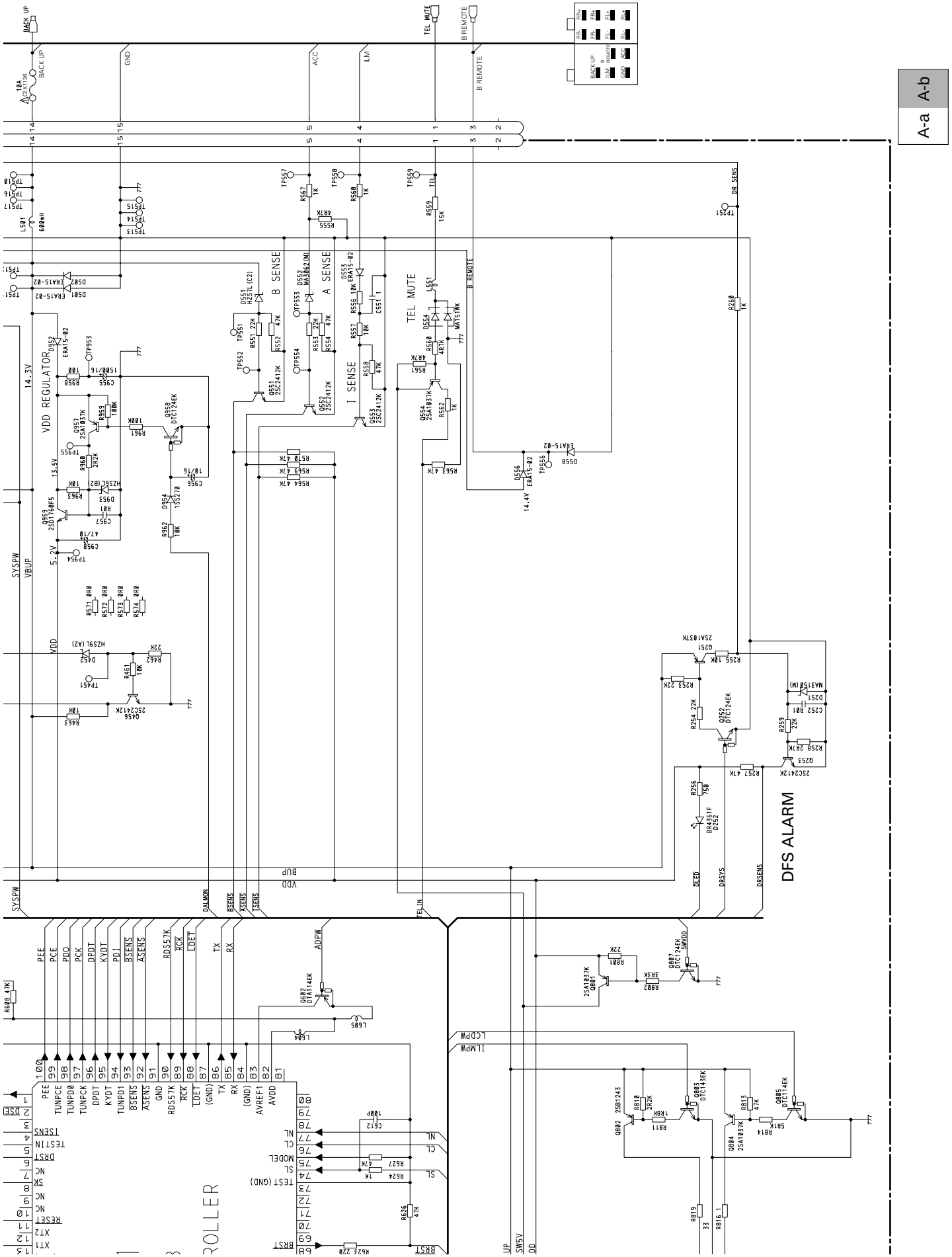

IC601
PD4960B
SYSTEM CONTROLLI
CN801
CN901
CN201
RDS DECODER
MD MECHANISM MODULE
A.GND
PGND
BUP
VDD
A-a
A-b



The ⚠ mark found on some component parts indicates the importance of the safety factor of the part. Therefore, when replacing, be sure to use parts of identical designation.

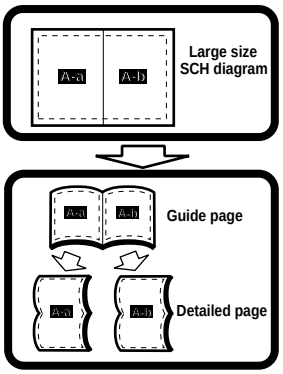
Decimal points for resistor and capacitor fixed values are expressed as:
2.2→2R2
0.022→R022

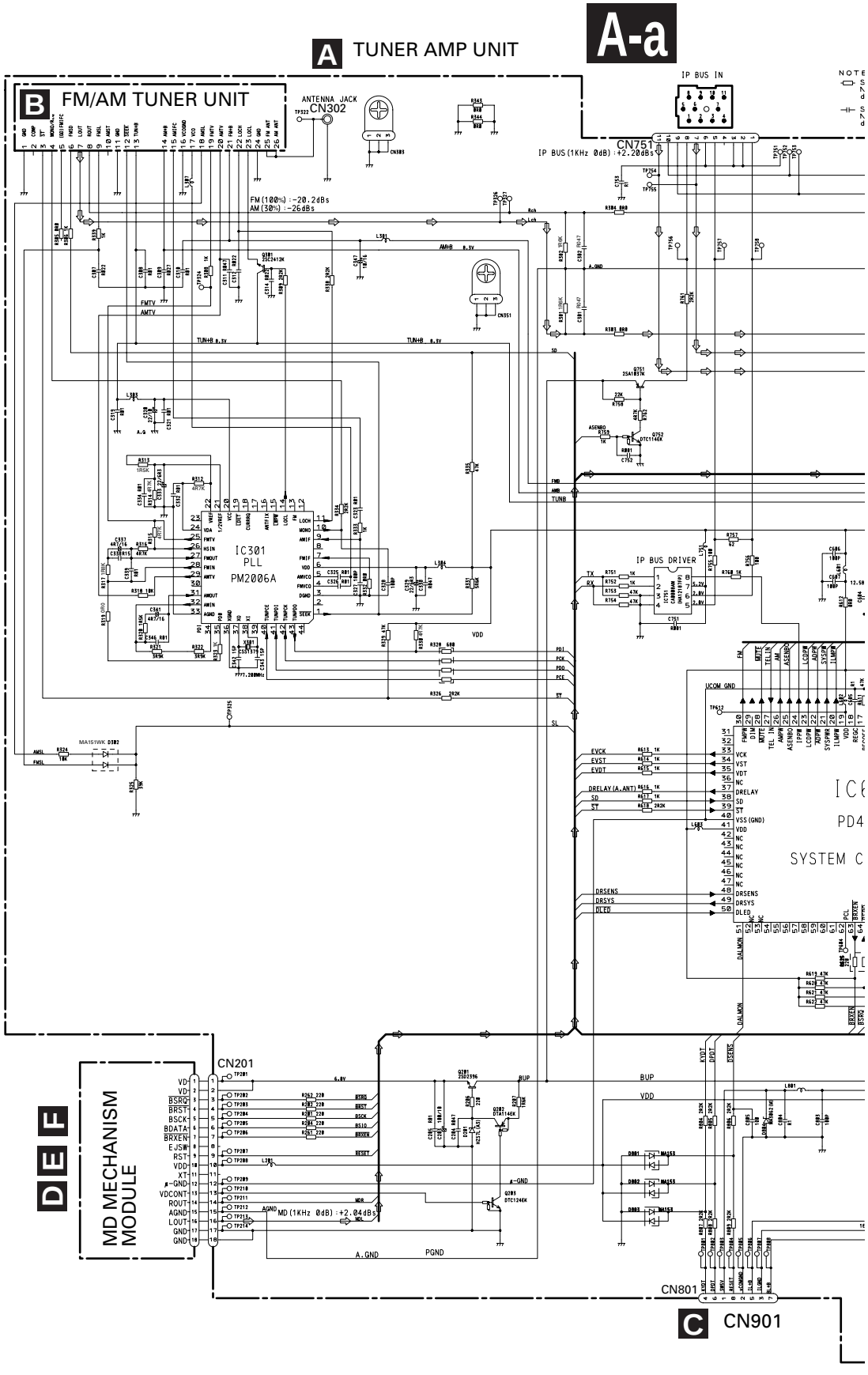
ndicates a resistor.
erentiation is made between chip resistors and
e resistors.
ndicates a capacitor.
erentiation is made between chip capacitors and
e capacitors.


A-a A-b
BACK UP
GND
ACC
ILM
TEL MUTE
B REMOTE
VDD REGULATOR
14.3V
13.5V
5.2V
B SENSE
A SENSE
I SENSE
TEL MUTE
DFS ALARM
SYSPW
VBUP
VDD
BUP
DALMON
BSENS
ASENS
ISENS
TELIN
ADPW
LCDPW
ILMPW
SWSV
UP
DD
DR SENS
PEE
PCE
PDO
PCK
DPDT
KYDT
PDI
TUNPD1
TUNPD0
TUNPCK
RDS57K
RCK
LDET
TX
RX
AVREF1
AVDD
TUNPCE
TESTIN
DRST
SK
RESET
XT2
XT1
TEST (GND)
MODEL
BRST
ROLLER

3.4 OVERALL CONNECTION DIAGRAM(GUIDE PAGE)(MEH-P5000/UC)

Note: When ordering service parts, be sure to refer to "EXPLODED VIEWS AND PARTS LIST" or "ELECTRICAL PARTS LIST".



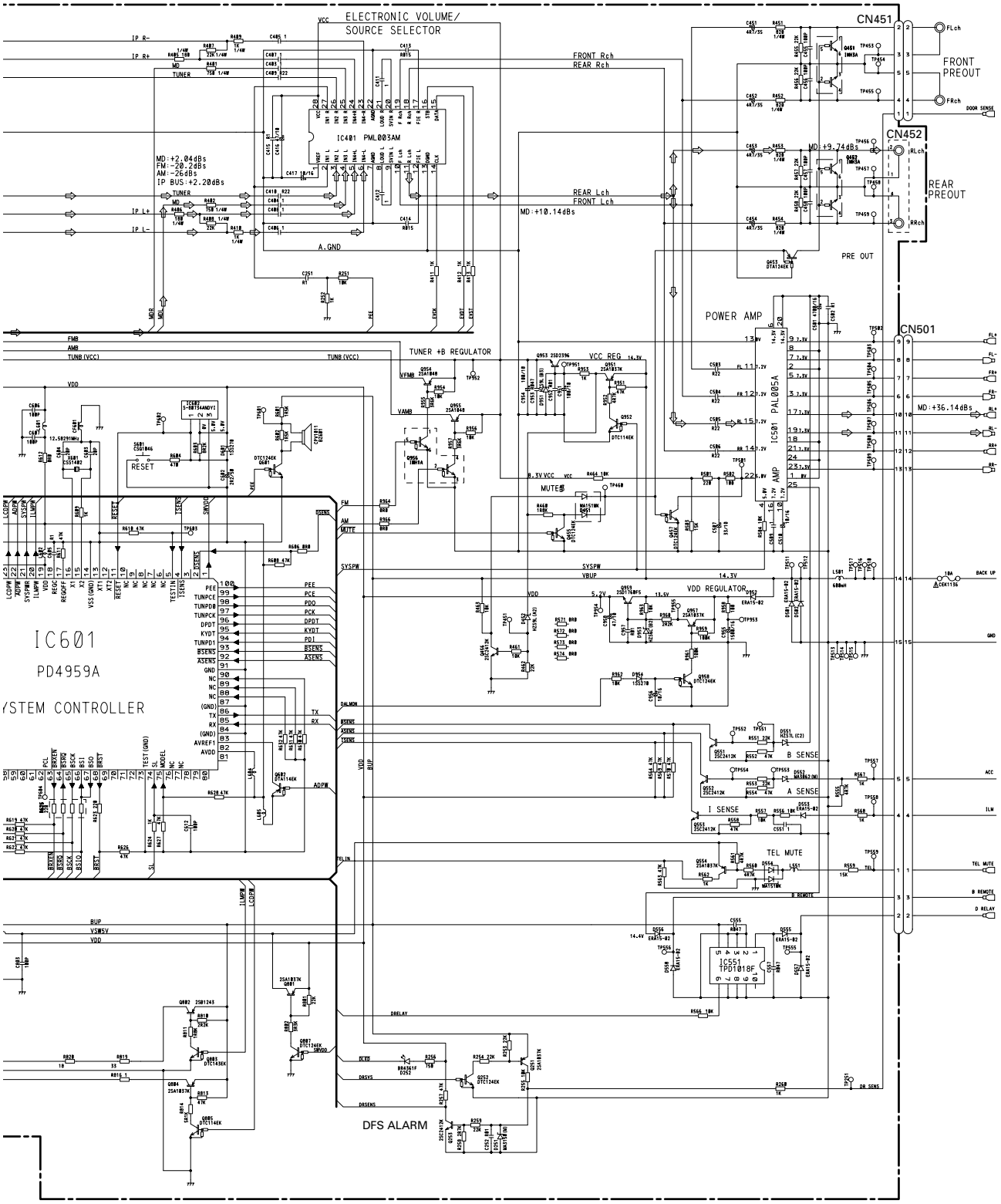


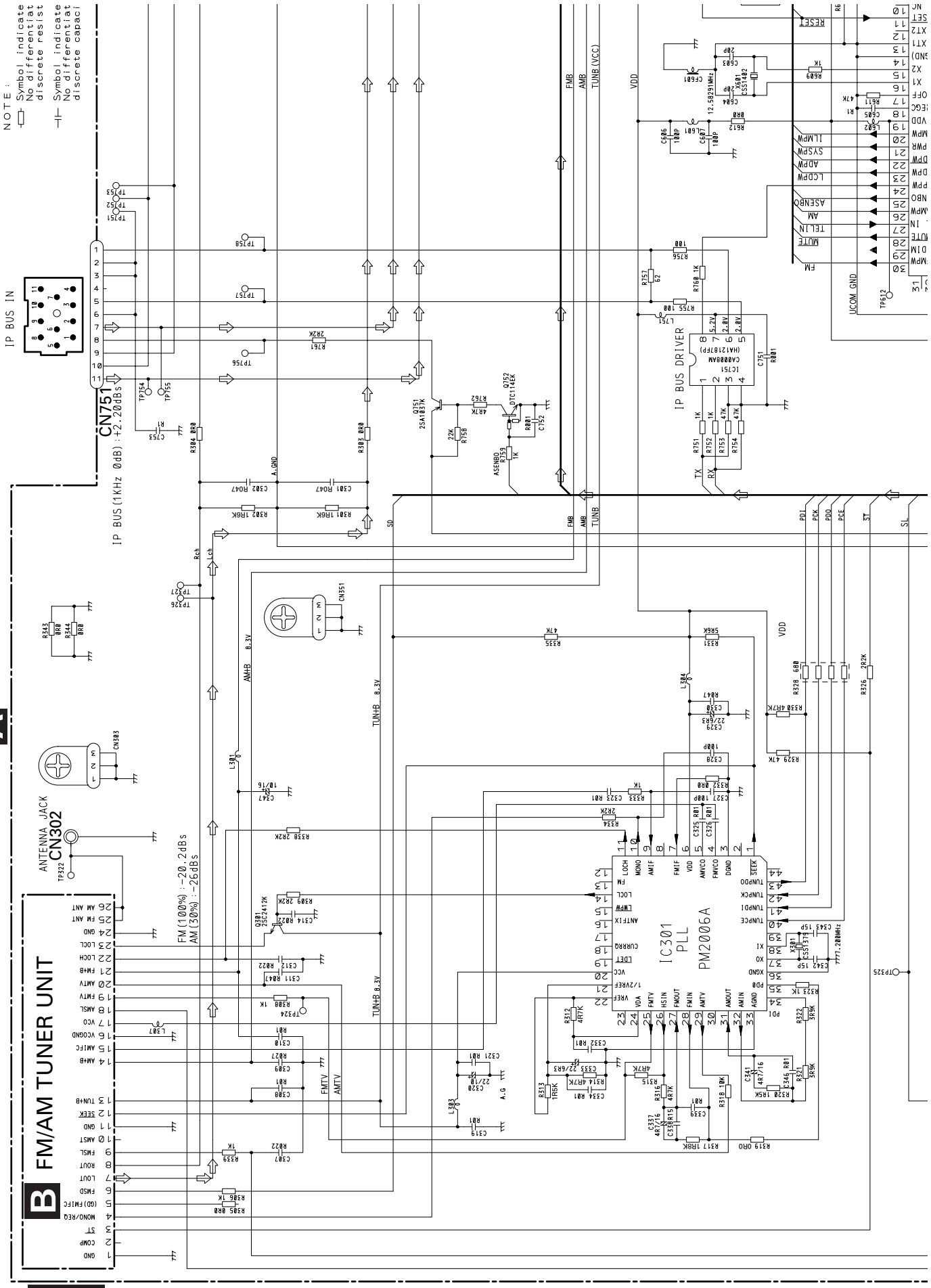
A-b

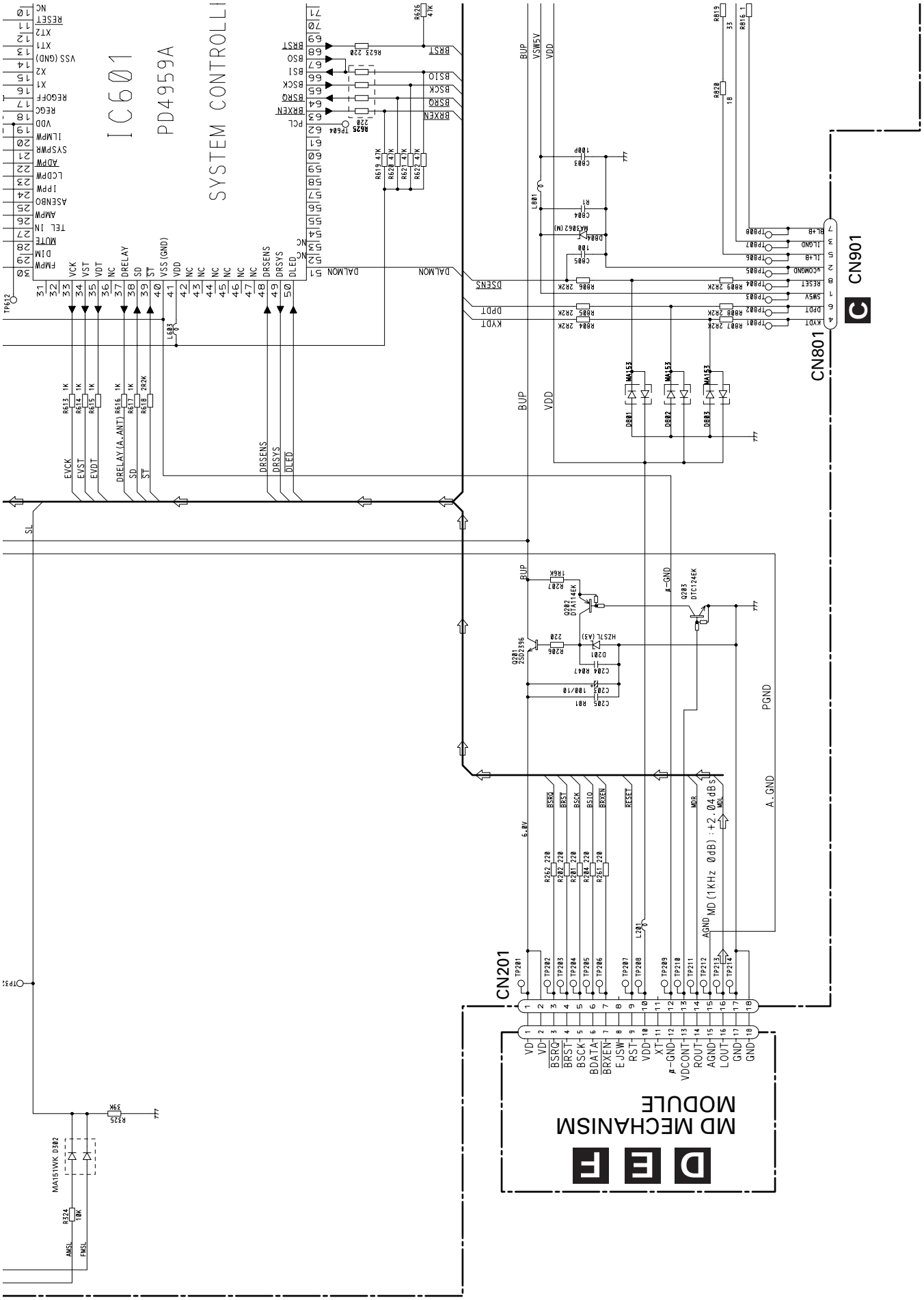
NOTE:
- Symbol indicates a resistor. No differentiation is made between chip resistors and discrete resistors.
- Symbol indicates a capacitor. No differentiation is made between chip capacitors and discrete capacitors.

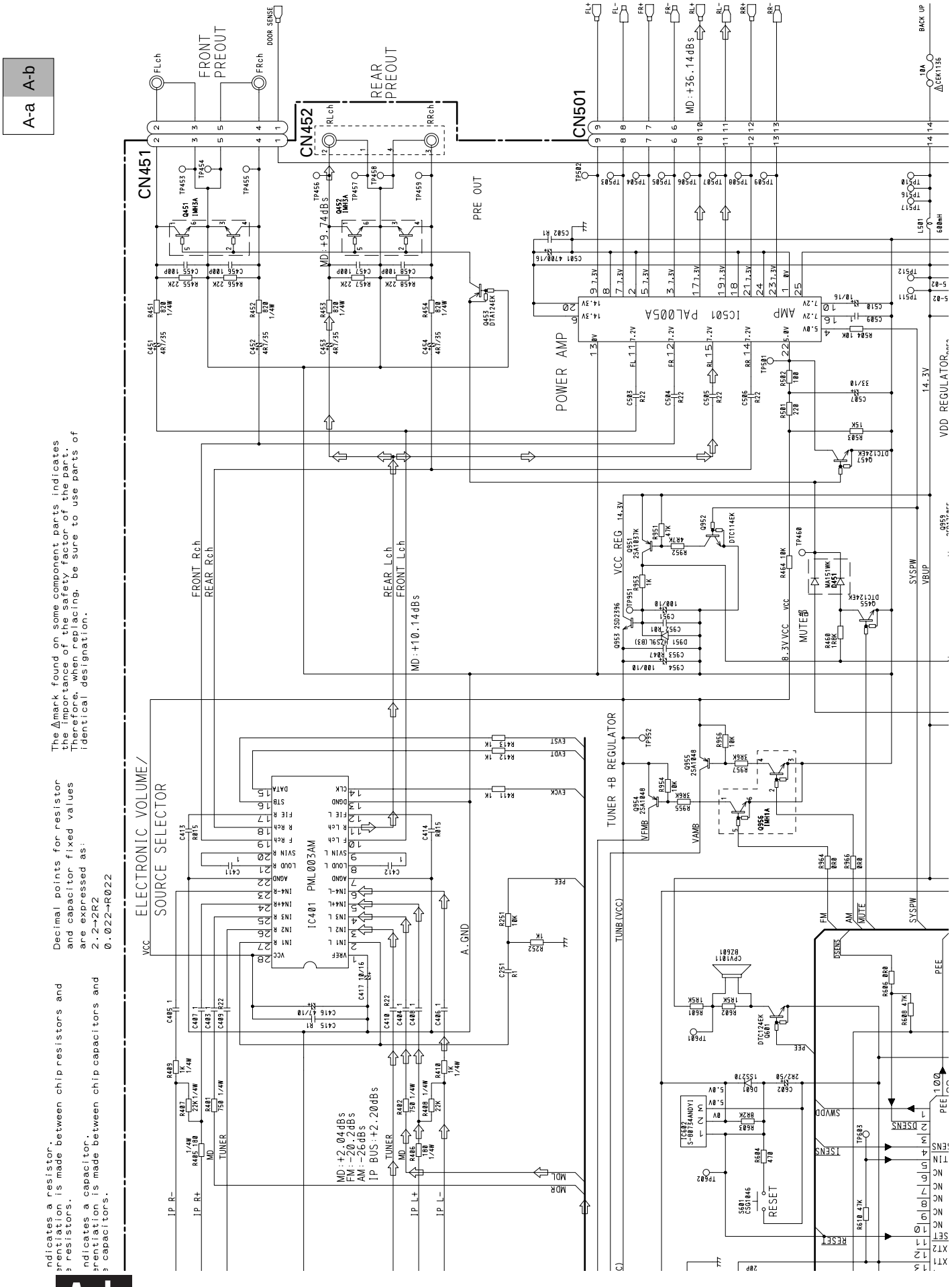
Decimal points for resistor and capacitor fixed values are expressed as:
2.2→2R2
0.022→R022

The △mark found on some component parts indicates the importance of the safety factor of the part. Therefore, when replacing, be sure to use parts of identical designation.




A-a A-b
NOTE :
Symbol indicate No differentiat discrete resist
Symbol indicate No differentiat discrete capaci
A TUNER AMP UNIT
B FM/AM TUNER UNIT
CN751
IP BUS (1KHz 0dB) : +2.20dBs
IP BUS IN
IP BUS DRIVER
IC751
CA0008AM
(HA12187FP)
IC301
PLL
PM2006A
CN302
ANTENNA JACK
FM (100%) : -20.2dBs
AM (30%) : -26dBs
CN351
CN383
VDD
FMB
AMB
TUNB (VCC)
SD
PDI
PCK
PDO
PCE
ST
SL
UCOM GND
TUNB 8.3V
AMB 8.3V
A.GND
Rch
Lch
FMTV
AMTV
SEEK
FM ANT
AM ANT
GND
LOCL
LOCH
FM+B
AMTV
FMTV
AM+B
AMIFC
VCO
VCOGND
AMSL
FMSL
AMST
TUN+B
SEEK
GND
LOUT
ROUT
FMSD
(GD)FMIFC
MONO/REQ
ST
COMP
GND

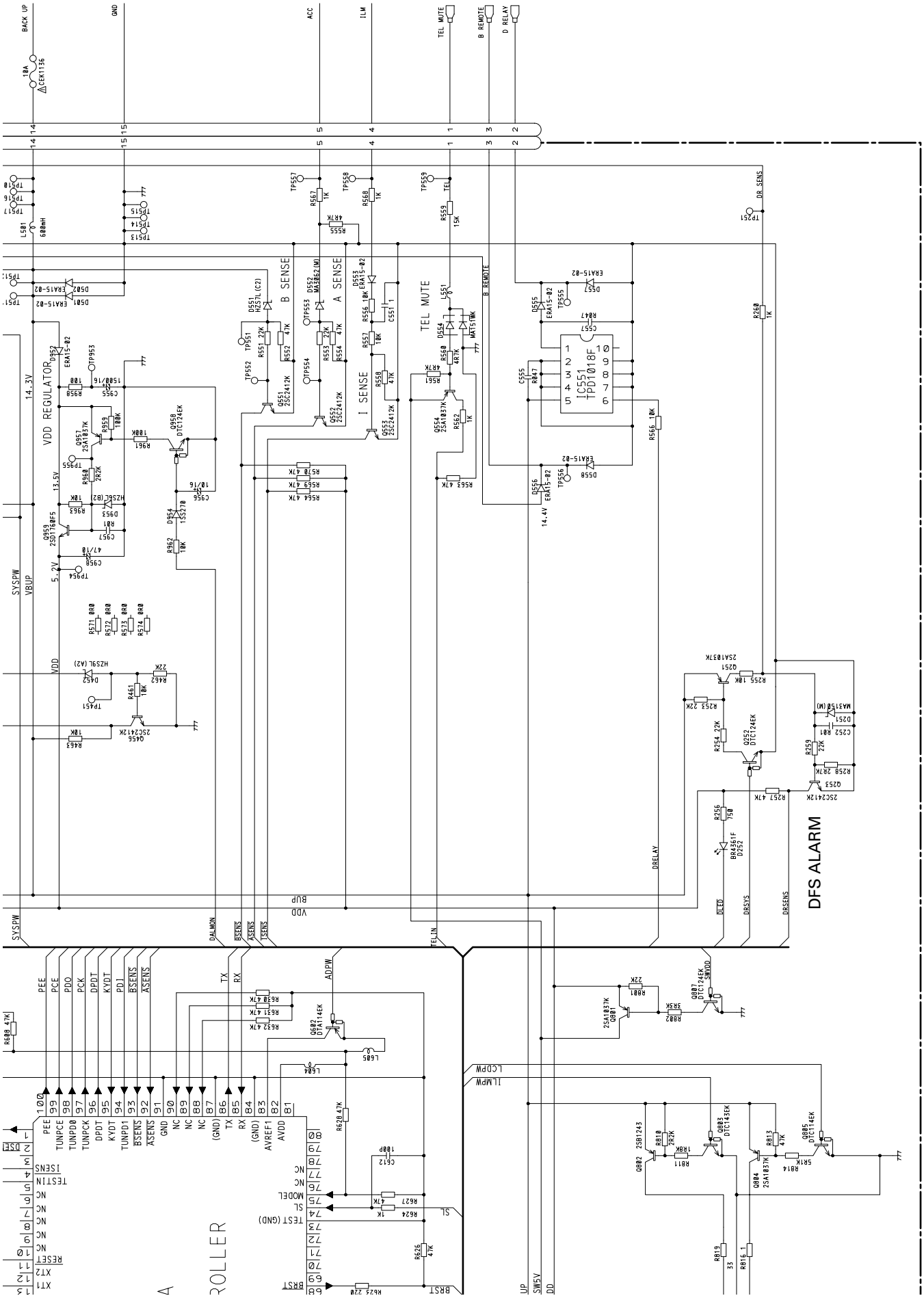

SYSTEM CONTROLLER
IC601
PD4959A
CN801
CN901
CN201
MD MECHANISM MODULE
A-a
A-b



The △mark found on some component parts indicates the importance of the safety factor of the part. Therefore, when replacing, be sure to use parts of identical designation.

Decimal points for resistor and capacitor fixed values are expressed as:
2.2→2R2
0.022→R022

ndicates a resistor.
prentiation is made between chip resistors and
e resistors.
ndicates a capacitor.
prentiation is made between chip capacitors and
e capacitors.

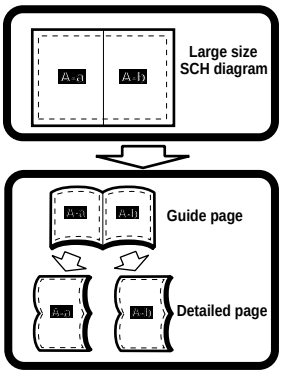

BACK UP
GND
ACC
ILM
TEL MUTE
B REMOTE
D RELAY
DR SENS
B SENSE
A SENSE
I SENSE
TEL MUTE
VDD REGULATOR
14.3V
13.5V
5.2V
SYSPW
VBUP
VDD
14.4V
IC551
TPD1018F
DFS ALARM
DRELAY
DLED
DRSYS
DRSENS
BSENS
ASENS
DALMON
TEL-IN
ADPW
LCDPW
ILMPW
SWSV
UP
DD
BRST
SL
TX
RX
PEE
PCE
PDO
PCK
DPDT
KYDT
PDI
TUNPD1
TUNPD0
TUNPCK
TESTIN
ISENS
RESET
XT1
XT2
(GND)
AVREF1
AVDD
NC
MODEL
TEST (GND)
ROLLER

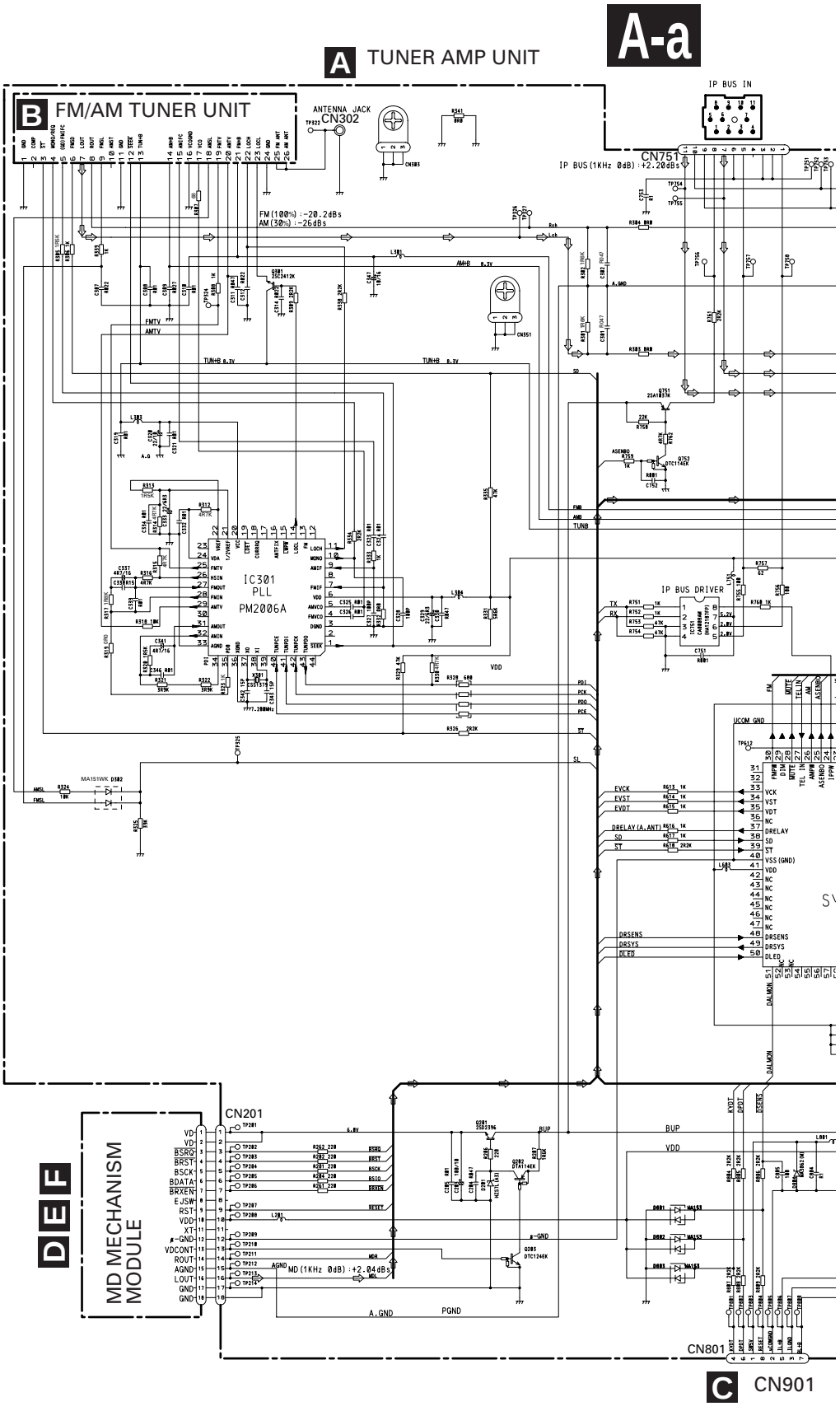
A-a A-b

A-b

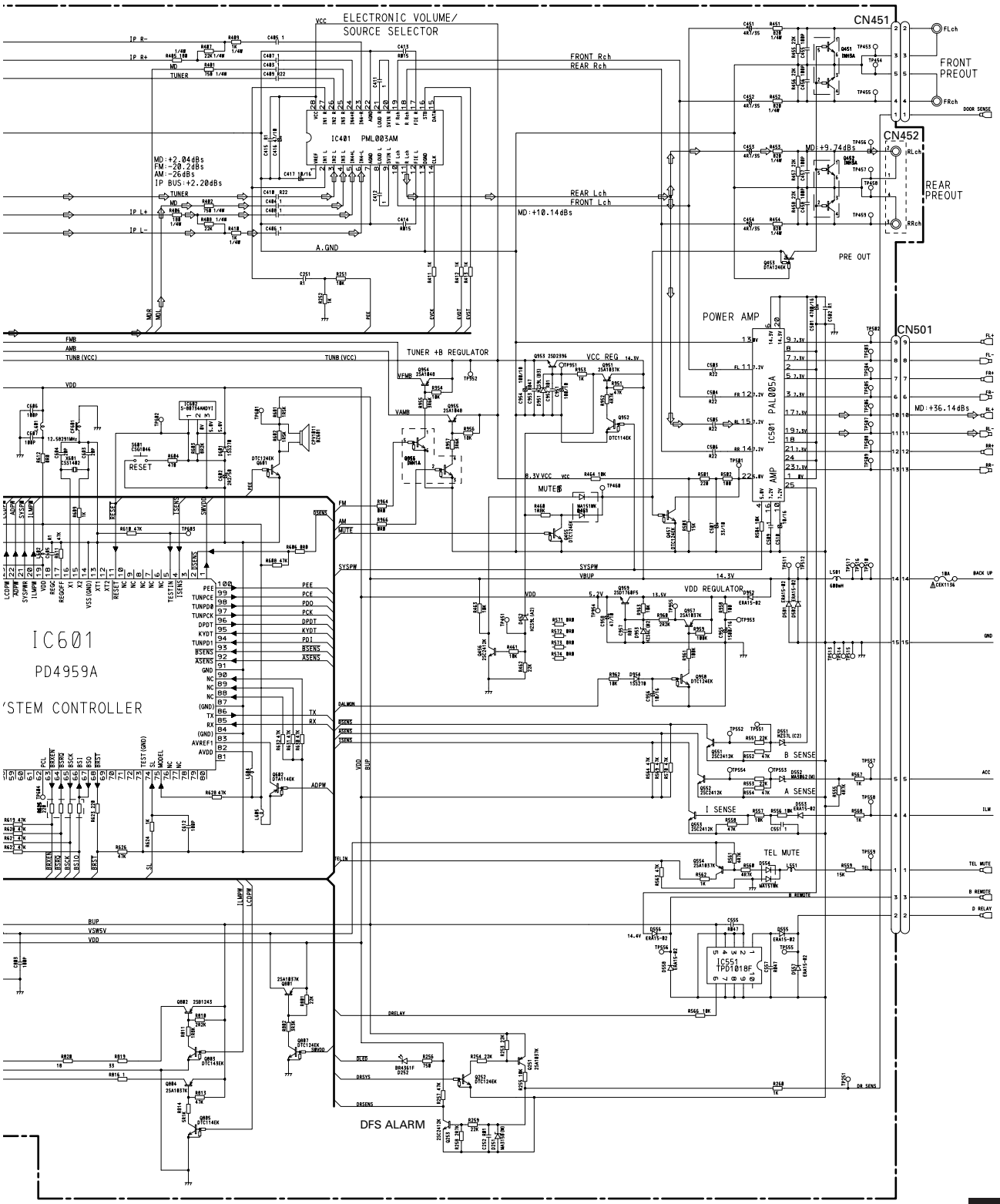
3.5 OVERALL CONNECTION DIAGRAM(GUIDE PAGE)(MEH-P5050/ES)

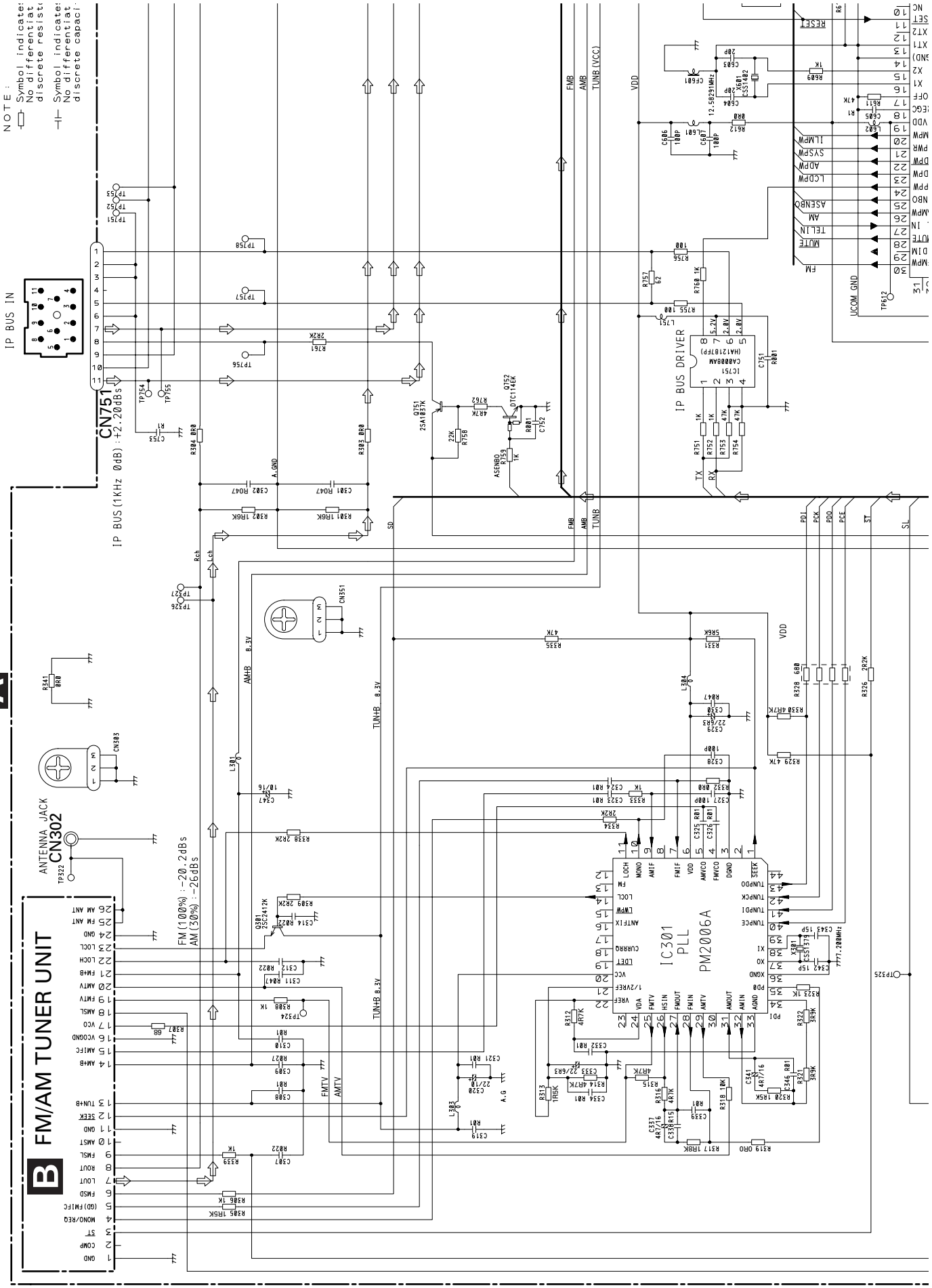
Note: When ordering service parts, be sure to refer to "EXPLODED VIEWS AND PARTS LIST" or "ELECTRICAL PARTS LIST".

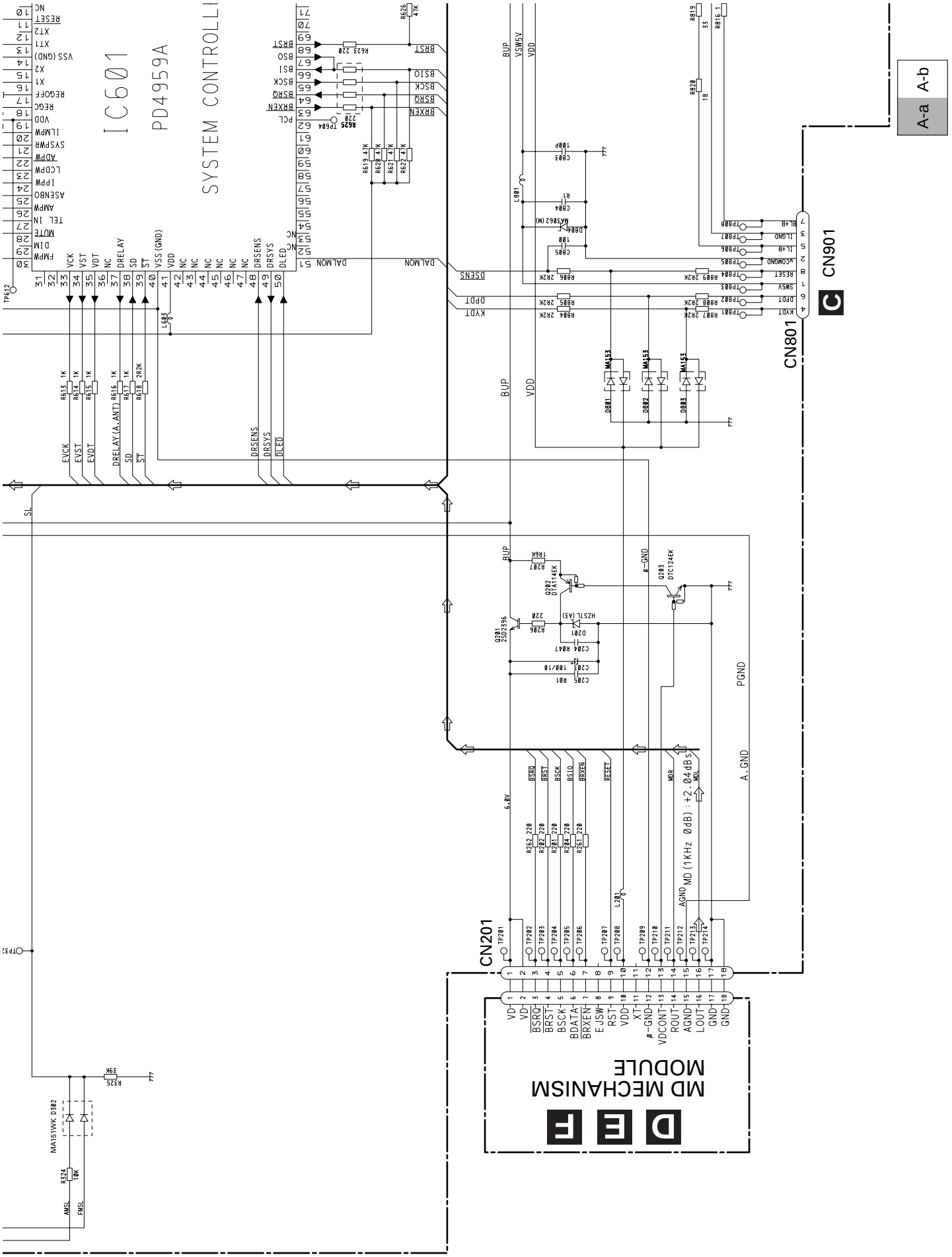


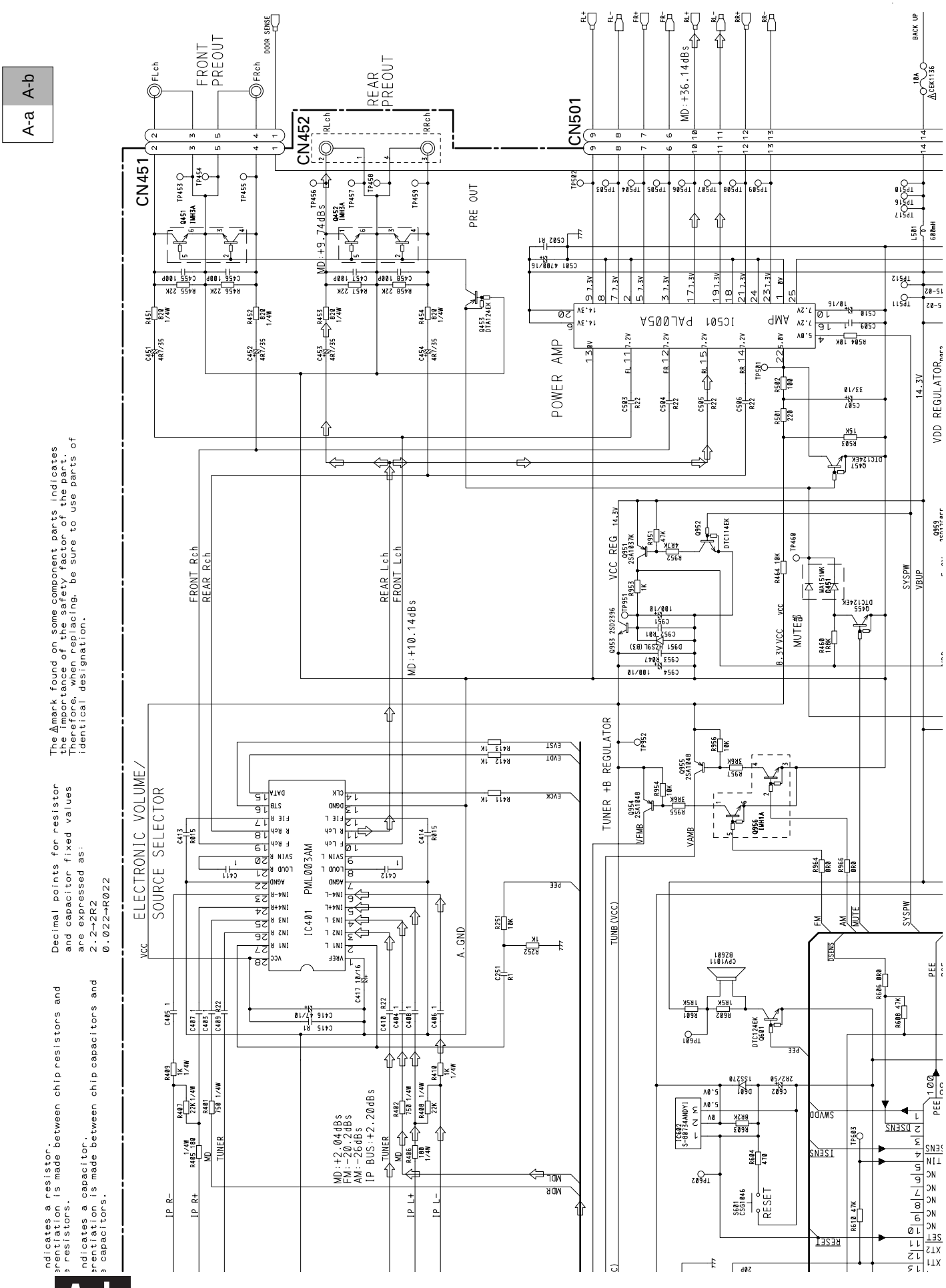


A-b


NOTE :
Symbol indicates a resistor.
No differentiation is made between chip resistors and discrete resistors.
Symbol indicates a capacitor.
No differentiation is made between chip capacitors and discrete capacitors.
Decimal points for resistor and capacitor fixed values are expressed as:
2.2→2R2
0.022→R022
The ⚠ mark found on some component parts indicates the importance of the safety factor of the part. Therefore, when replacing, be sure to use parts of identical designation.
ELECTRONIC VOLUME/ SOURCE SELECTOR
IC401 PML003AM
MD:+2.04dBs
FM:-20.2dBs
AM:-26dBs
IP BUS:+2.20dBs
MD:+9.74dBs
MD:+10.14dBs
MD:+36.14dBs
FRONT Rch
REAR Rch
REAR Lch
FRONT Lch
A.GND
PRE OUT
POWER AMP
IC501 PAL005A
AMP
TUNER +B REGULATOR
VCC REG
MUTE
VDD REGULATOR
IC601
PD4959A
'STEM CONTROLLER
RESET
B SENSE
A SENSE
I SENSE
TEL MUTE
DFS ALARM
IC551
TPD1018F
CN451
CN452
CN501
FRONT PREOUT
REAR PREOUT
FLch
FRch
RLch
RRch
DOOR SENSE
BACK UP
ACC
ILM
B REMOTE
D RELAY
DR SENS


A-a A-b
NOTE :
Symbol indicates
No differential
discrete resist
Symbol indicates
No differential
discrete capaci
A TUNER AMP UNIT
B FM/AM TUNER UNIT
CN751
IP BUS (1KHz 0dB) : +2.20dBs
IP BUS IN
IP BUS DRIVER
IC751
CA0008AM
(HA12187FP)
CN302
ANTENNA JACK
FM (100%) : -20.2dBs
AM (30%) : -26dBs
IC301
PLL
PM2006A
12.582MHz
7.200MHz
CN351
CN383
VDD
TUNB (VCC)
FMB
AMB
TUNB
SD
PDI
PCK
PDO
PCE
ST
SL
Rch
Lch
AM+B 8.3V
TUN+B 8.3V
A.GND
FMTV
AMTV
UCOM GND

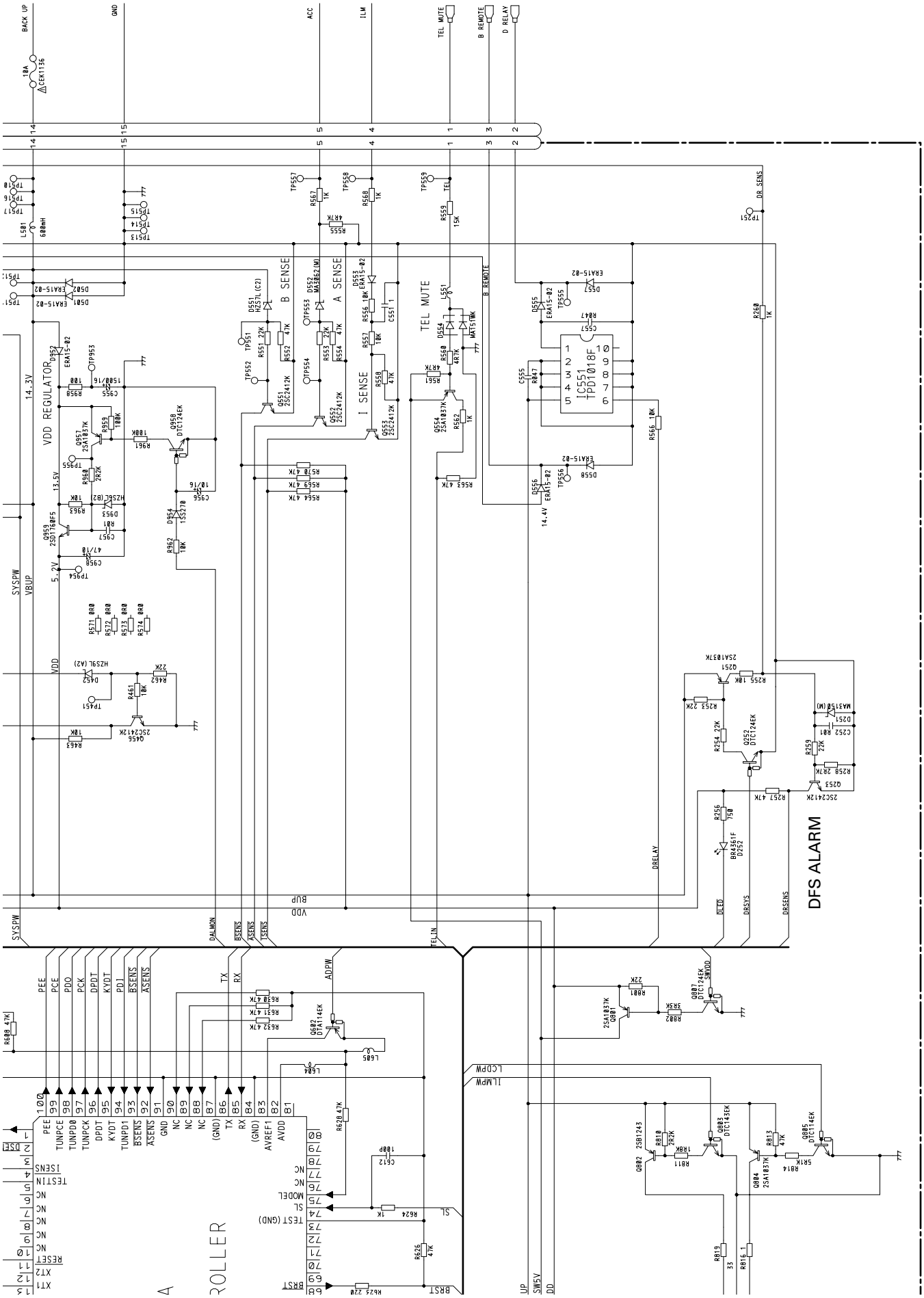

SYSTEM CONTROLLER
IC601
PD4959A
CN801
CN901
CN201
MD MECHANISM MODULE
A-a
A-b
PGND
A.GND
BUP
VDD
MD (1KHz 0dB) : +2.04dBs



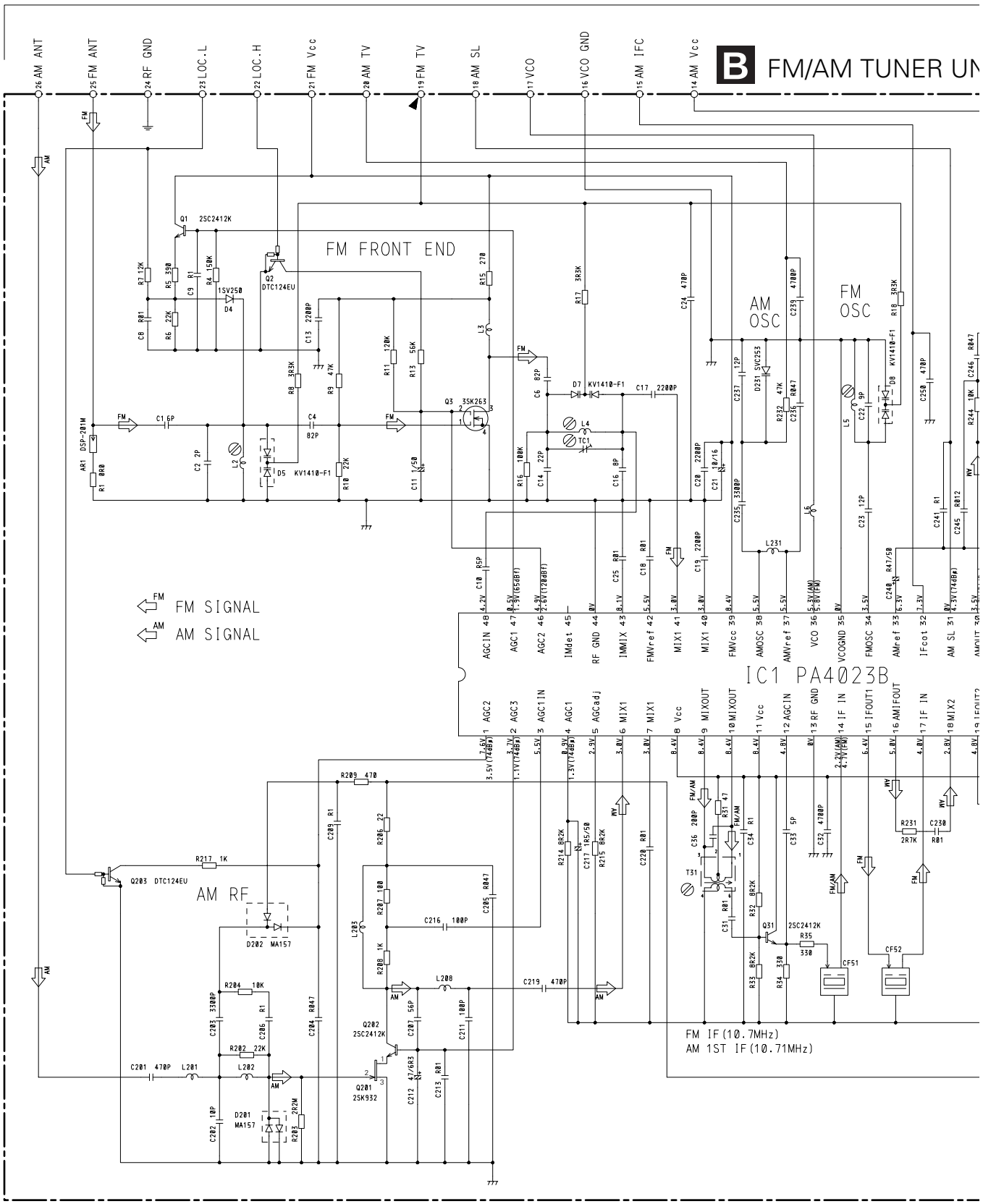
The △mark found on some component parts indicates the importance of the safety factor of the part. Therefore, when replacing, be sure to use parts of identical designation.

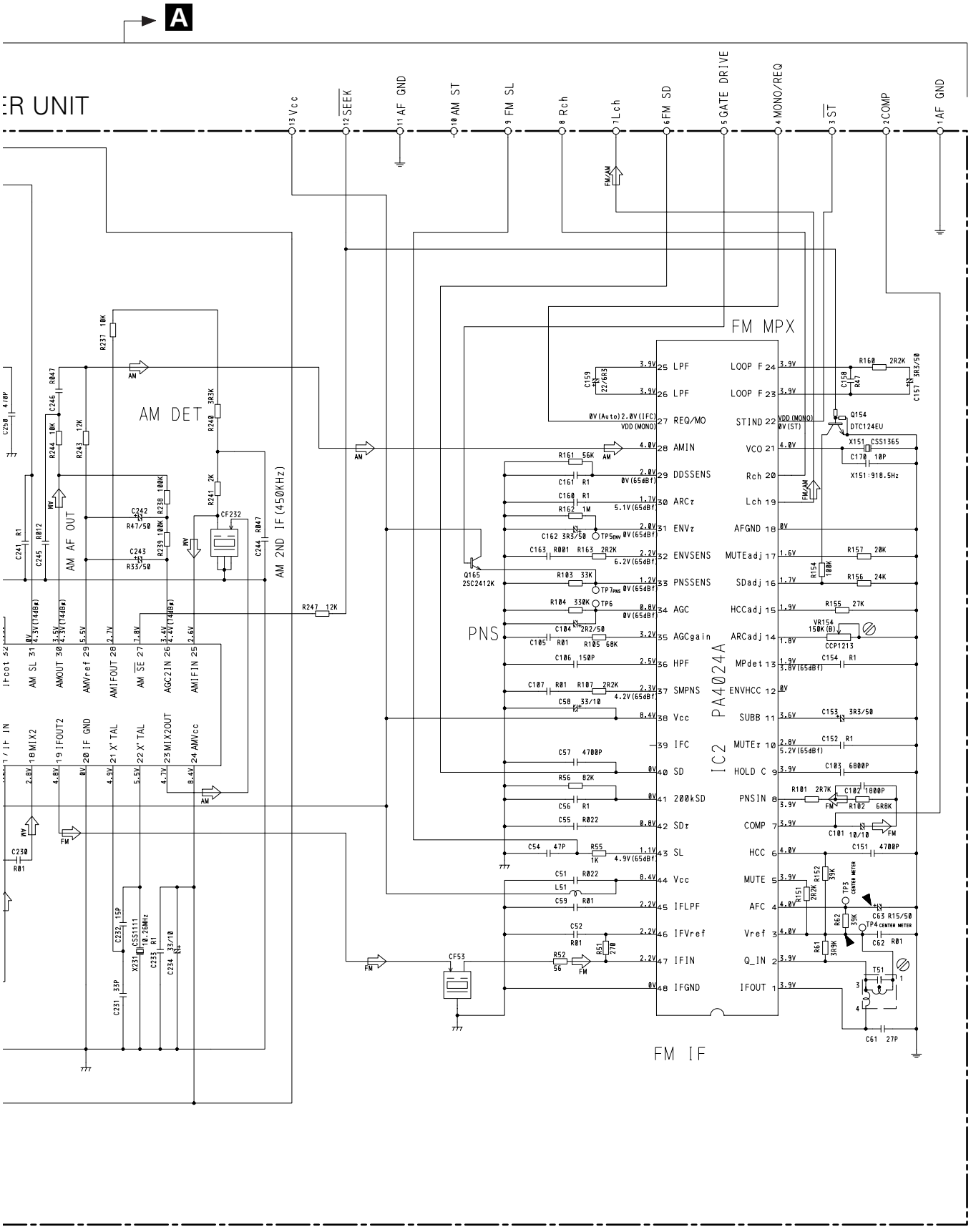
Decimal points for resistor and capacitor fixed values are expressed as:
2.2→2R2
0.022→R022

ndicates a resistor.
prentiation is made between chip resistors and
e resistors.
ndicates a capacitor.
prentiation is made between chip capacitors and
e capacitors.

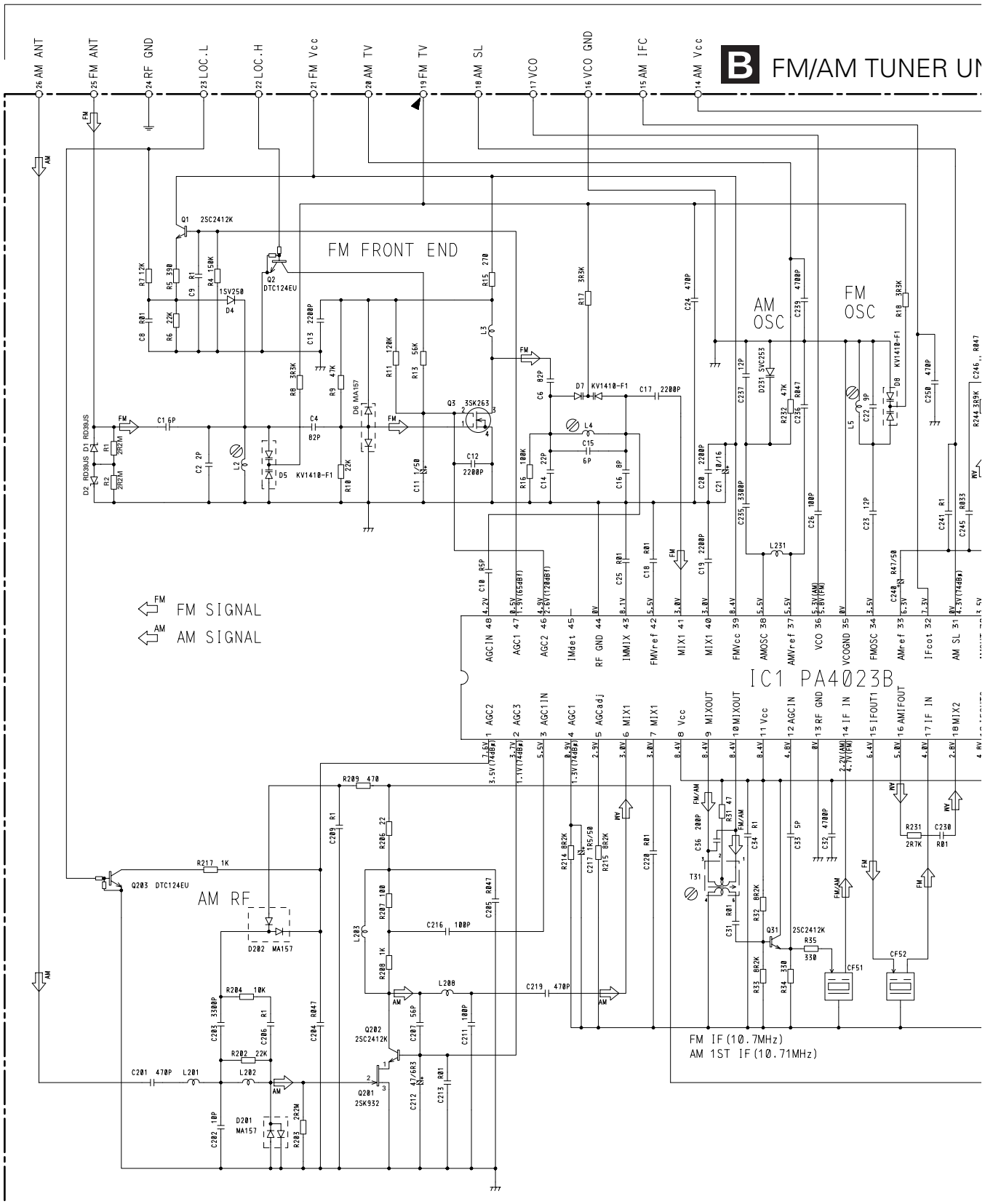

BACK UP
GND
ACC
ILM
TEL MUTE
B REMOTE
D RELAY
DR SENS
B SENSE
A SENSE
I SENSE
TEL MUTE
VDD REGULATOR
14.3V
13.5V
5.2V
SYSPW
VBUP
VDD
IC551
TPD1018F
14.4V
DFS ALARM
DRELAY
DLED
DRSYS
DRSENS
BUP
DALMON
BSENS
ASENS
TEL-IN
ADPW
LCDPW
ILMPW
SWSV
DD
UP
TX
RX
PEE
PCE
PDO
PCK
DPDT
KYDT
PDI
TUNPD1
TUNPD0
TUNPCK
TESTIN
RESET
XT1
XT2
SL
MODEL
TEST (GND)
BRST
AVDD
AVREF1
(GND)
NC
ROLLER

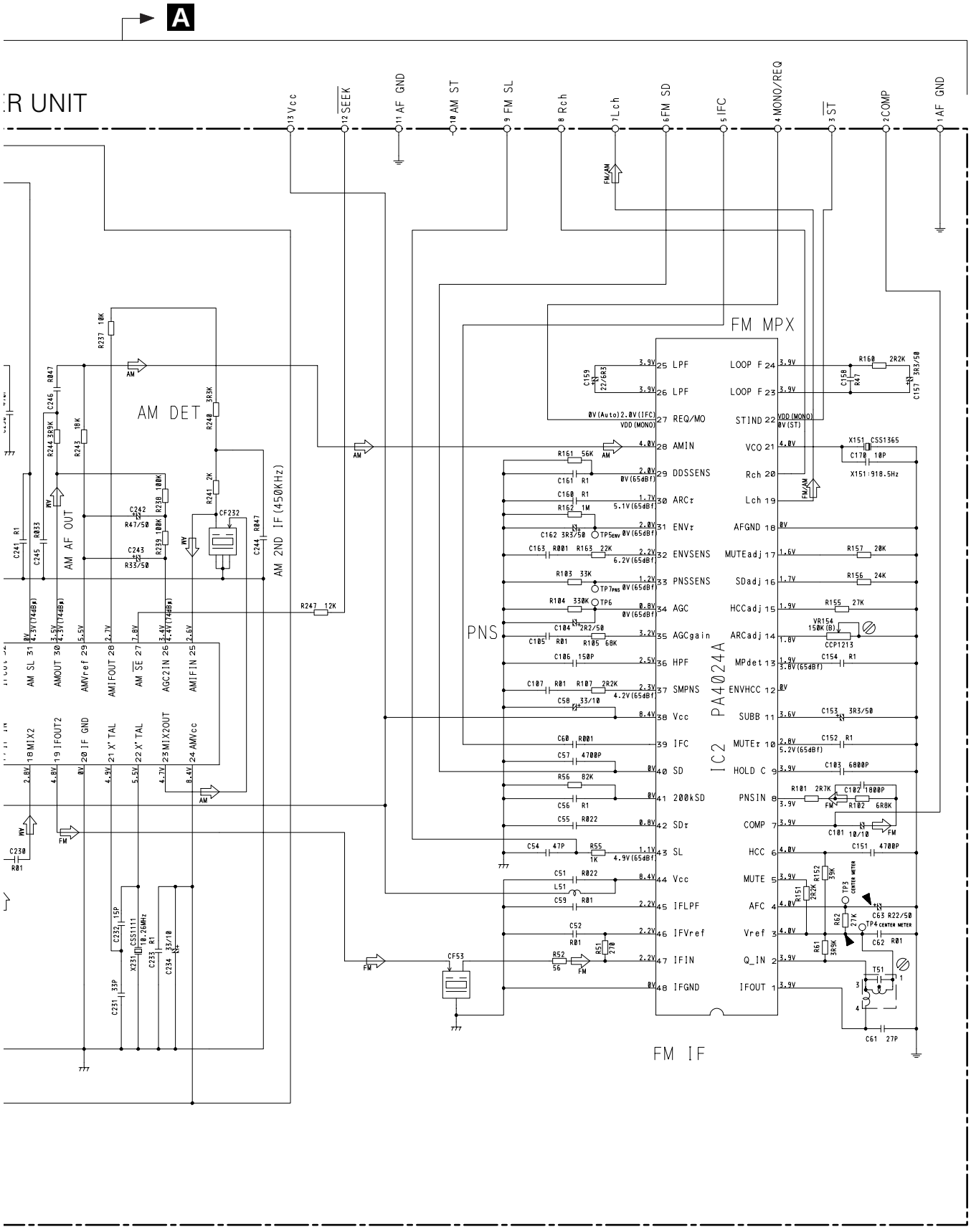
3.6 FM/AM TUNER UNIT(MEH-P5000RII/EW)



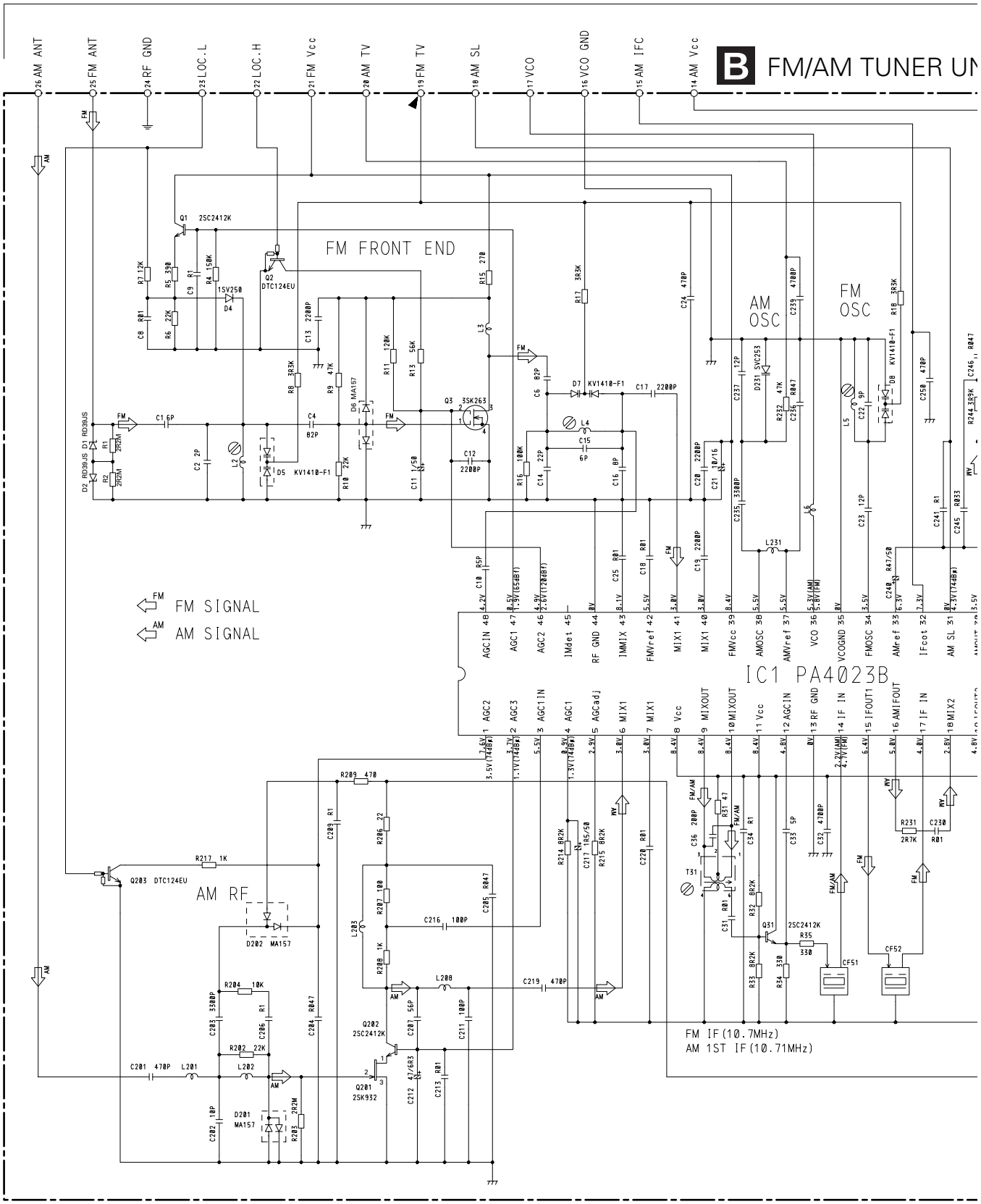

A
ER UNIT
13 Vcc
12 SEEK
11 AF GND
10 AM ST
9 FM SL
8 Rch
7 Lch
6 FM SD
5 GATE DRIVE
4 MONO/REQ
3 ST
2 COMP
1 AF GND
FM MPX
AM DET
AM AF OUT
AM 2ND IF (450KHz)
PNS
IC2 PA4024A
FM IF
25 LPF
26 LPF
27 REQ/MO
28 AMIN
29 DDSSENS
30 ARCr
31 ENVr
32 ENVSENS
33 PNSSENS
34 AGC
35 AGCgain
36 HPF
37 SMPNS
38 Vcc
39 IFC
40 SD
41 200kSD
42 SDr
43 SL
44 Vcc
45 IFLPF
46 IFVref
47 IFIN
48 IFGND
LOOP F 24
LOOP F 23
STIND 22
VCO 21
Rch 20
Lch 19
AFGND 18
MUTEadj 17
SDadj 16
HCCadj 15
ARCadj 14
MPdet 13
ENVHCC 12
SUBB 11
MUTEr 10
HOLD C 9
PNSIN 8
COMP 7
HCC 6
MUTE 5
AFC 4
Vref 3
Q_IN 2
IFOUT 1
Q154 DTC124EU
X151 CSS1365
X151:918.5Hz
Q165 2SC2412K
CF232
CF53
TP5ENV
TP7PNS
TP6
TP3 CENTER METER
TP4 CENTER METER
VR154 150K(B)
T51

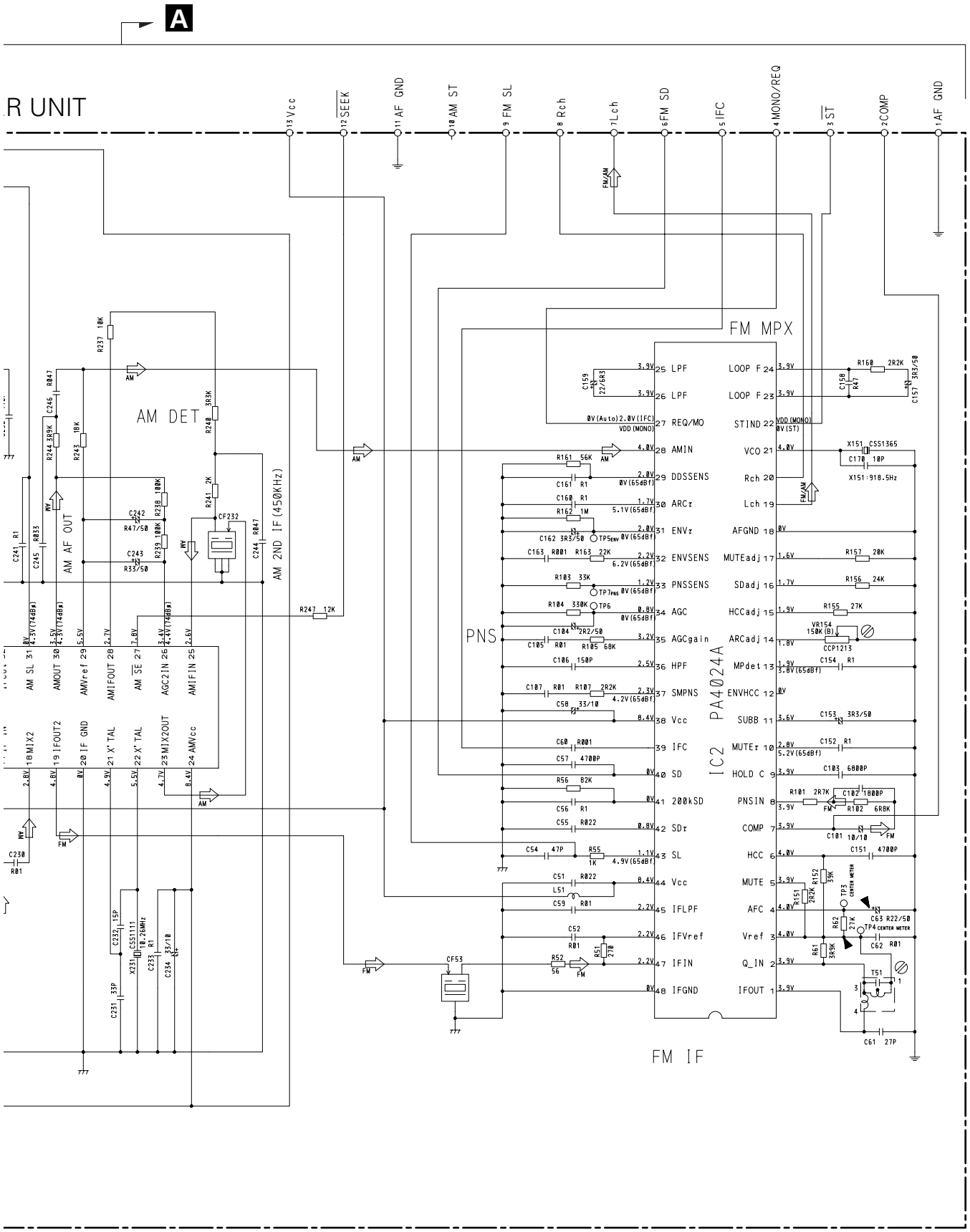
3.7 FM/AM TUNER UNIT(MEH-P5000/UC)




A
R UNIT
13 Vcc
12 SEEK
11 AF GND
10 AM ST
9 FM SL
8 Rch
7 Lch
6 FM SD
5 IFC
4 MONO/REQ
3 ST
2 COMP
1 AF GND
AM DET
AM AF OUT
AM 2ND IF (450KHz)
FM MPX
PNS
IC2 PA4024A
FM IF
25 LPF
26 LPF
27 REQ/MO
28 AMIN
29 DDSSENS
30 ARCr
31 ENVr
32 ENVSENS
33 PNSSENS
34 AGC
35 AGCgain
36 HPF
37 SMPNS
38 Vcc
39 IFC
40 SD
41 200kSD
42 SDr
43 SL
44 Vcc
45 IFLPF
46 IFVref
47 IFIN
48 IFGND
24 LOOP F
23 LOOP F
22 STIND
21 VCO
20 Rch
19 Lch
18 AFGND
17 MUTEadj
16 SDadj
15 HCCadj
14 ARCadj
13 MPdet
12 ENVHCC
11 SUBB
10 MUTEr
9 HOLD C
8 PNSIN
7 COMP
6 HCC
5 MUTE
4 AFC
3 Vref
2 Q_IN
1 IFOUT
AM SL 31
AMOUT 30
AMVref 29
AMIFOUT 28
AM SE 27
AGC2IN 26
AMIFIN 25
18 MIX2
19 IFOUT2
20 IF GND
21 X'TAL
22 X'TAL
23 MIX2OUT
24 AMVcc
X151 CSS1365
X151:918.5Hz
X231 CSS1111 16.25MHz
CF232
CF53
TP4 CENTER METER
TP3 CENTER METER
TP5 TP6 TP7
T51
VR154 150K(B)
C61 27P

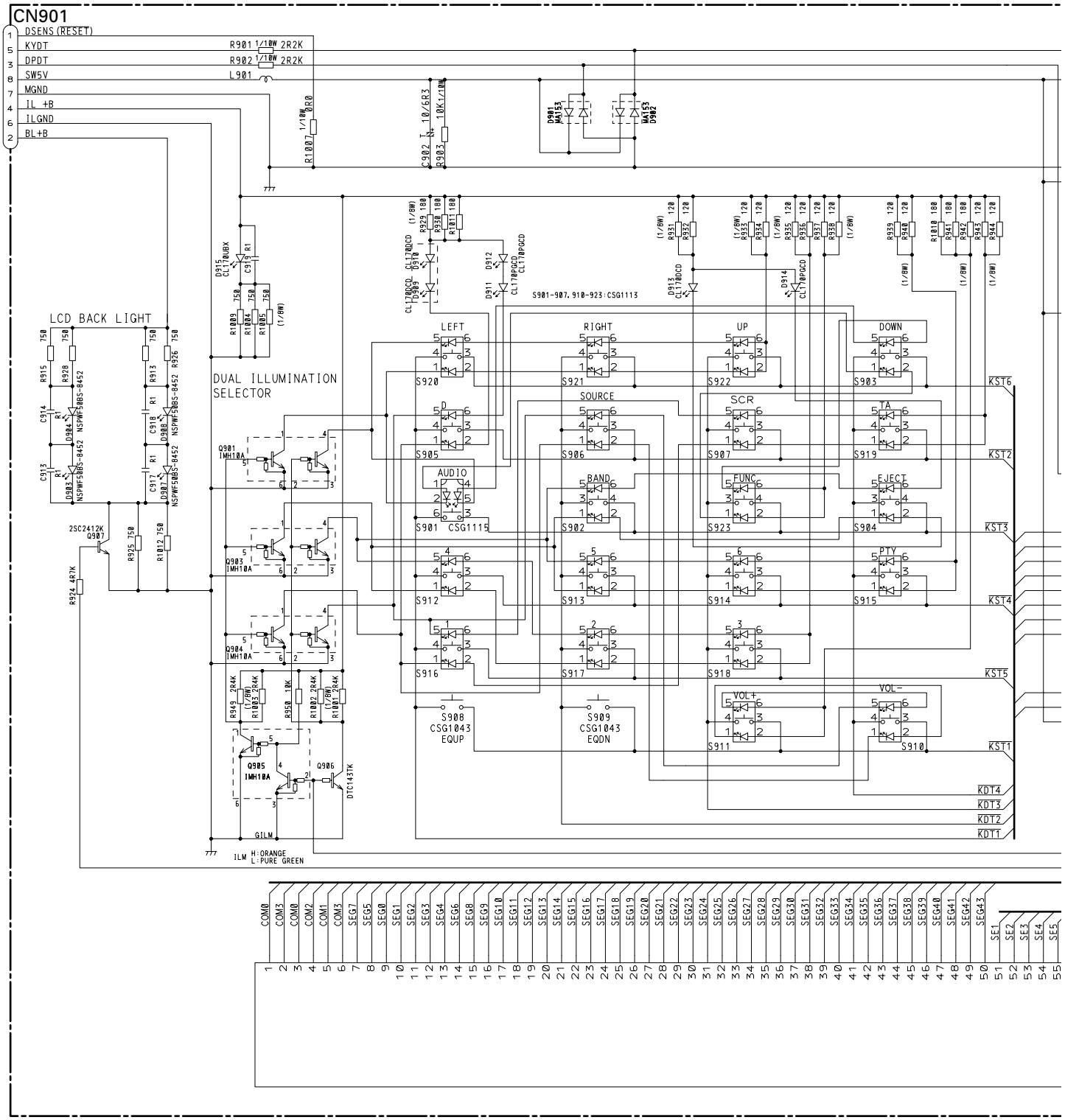
3.8 FM/AM TUNER UNIT(MEH-P5050/ES)

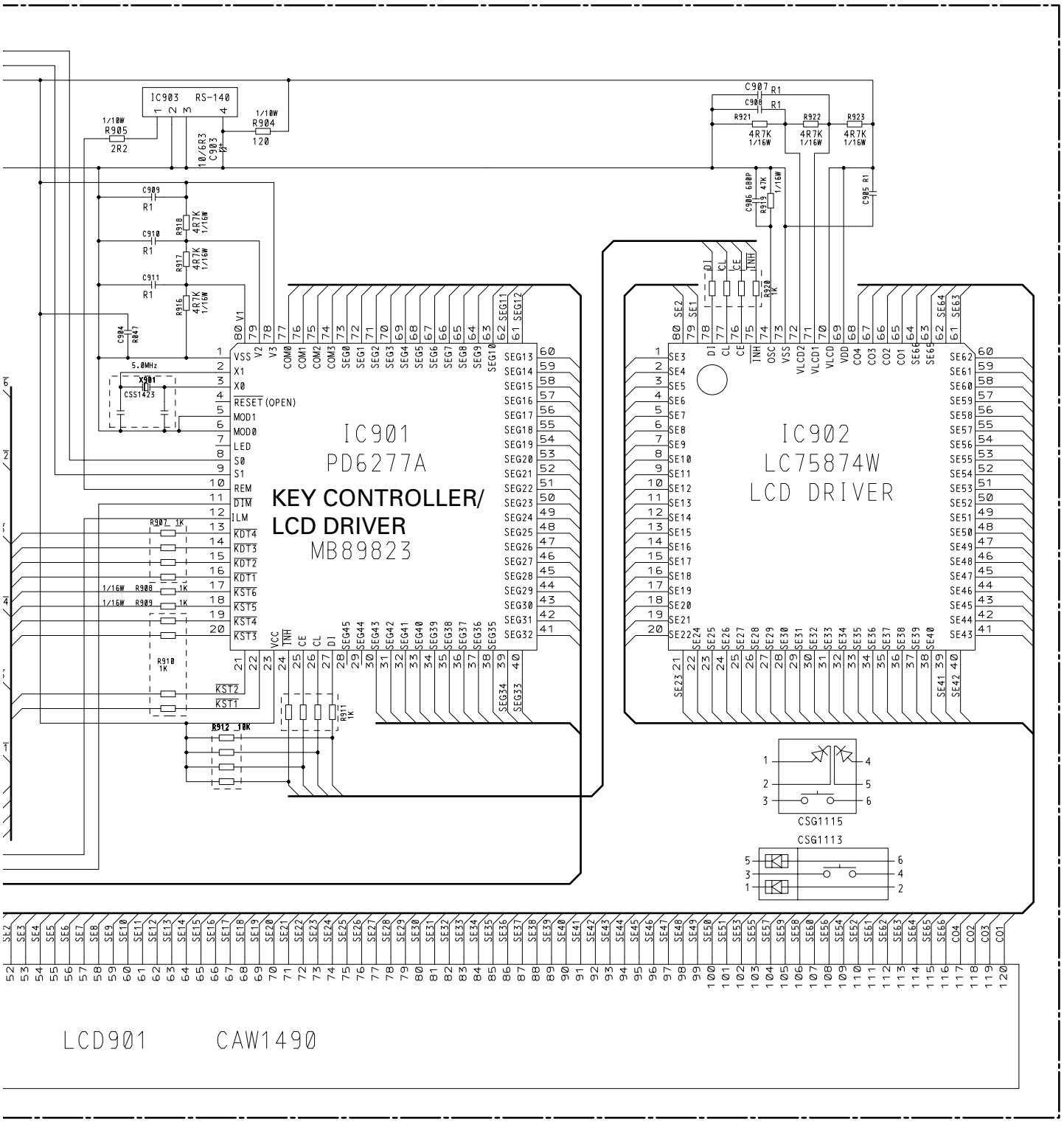



A
R UNIT
13 Vcc
12 SEEK
11 AF GND
10 AM ST
9 FM SL
8 Rch
7 Lch
6 FM SD
5 IFC
4 MONO/REQ
3 ST
2 COMP
1 AF GND
FM MPX
AM DET
AM AF OUT
AM 2ND IF (450KHz)
PNS
IC2 PA4024A
FM IF
25 LPF
26 LPF
27 REQ/MO
28 AMIN
29 DDSSENS
30 ARCτ
31 ENVτ
32 ENVSENS
33 PNSSENS
34 AGC
35 AGCgain
36 HPF
37 SMPNS
38 Vcc
39 IFC
40 SD
41 200kSD
42 SDτ
43 SL
44 Vcc
45 IFLPF
46 IFVref
47 IFIN
48 IFGND
LOOP F 24
LOOP F 23
STIND 22
VCO 21
Rch 20
Lch 19
AFGND 18
MUTEadj 17
SDadj 16
HCCadj 15
ARCadj 14
MPdet 13
ENVHCC 12
SUBB 11
MUTEτ 10
HOLD C 9
PNSIN 8
COMP 7
HCC 6
MUTE 5
AFC 4
Vref 3
Q_IN 2
IFOUT 1
AM SL 31
AMOUT 30
AMVref 29
AMIFOUT 28
AM SE 27
AGC2IN 26
AMIFIN 25
18 MIX2
19 IFOUT2
20 IF GND
21 X'TAL
22 X'TAL
23 MIX2OUT
24 AMVcc
X151 CSS1365
X151:918.5Hz
X231 CSS1111
16.26MHz
CF232
CF53
TP5 ENV
TP6
TP7 PNS
TP3 CENTER METER
TP4 CENTER METER
T51
VR154 150K(B)
CCP1213
FM/AM
AM
FM

3.9 KEYBOARD UNIT(MEH-P5000RII/EW)

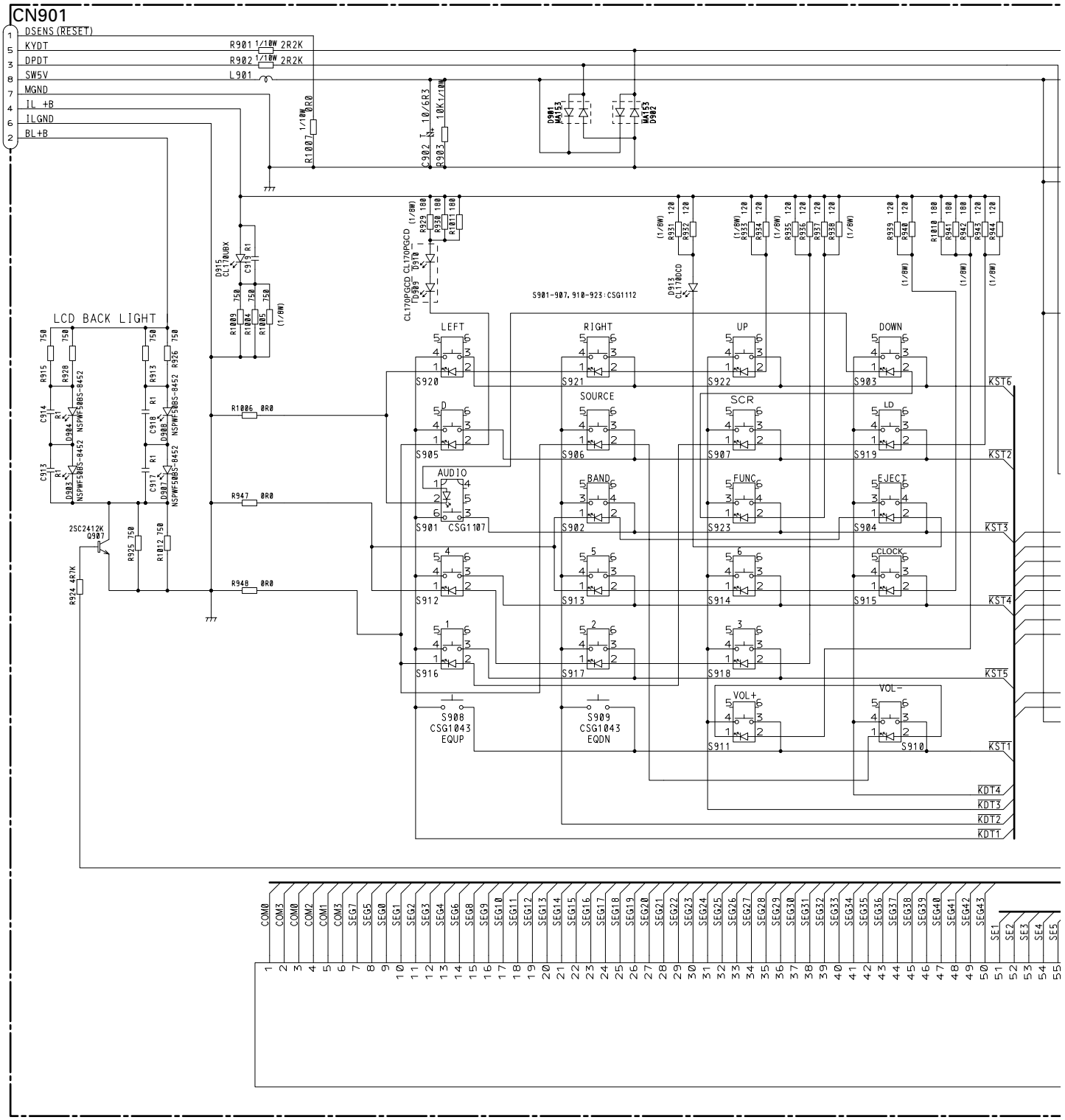
C KEYBOARD UNIT

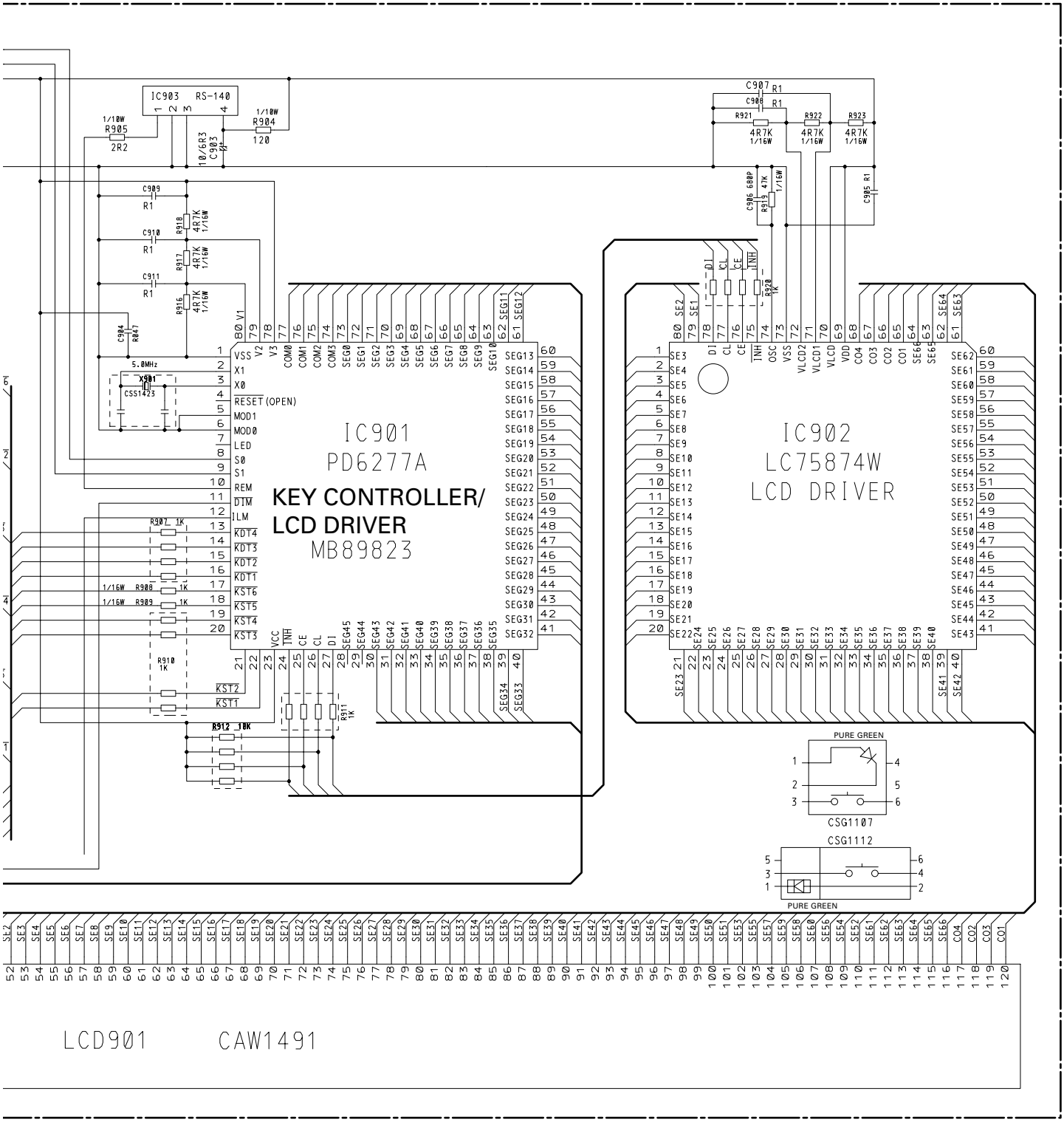



IC901
PD6277A
KEY CONTROLLER/
LCD DRIVER
MB89823
IC902
LC75874W
LCD DRIVER
IC903 RS-140
X901
5.0MHz
CSS1423
CSG1115
CSG1113
LCD901 CAW1490

3.10 KEYBOARD UNIT(MEH-P5000/UC, MEH-P5050/ES)

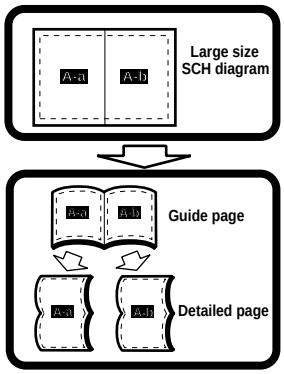
C KEYBOARD UNIT




IC901
PD6277A
KEY CONTROLLER/
LCD DRIVER
MB89823
IC902
LC75874W
LCD DRIVER
IC903 RS-140
X901
5.0MHz
CSS1423
PURE GREEN
CSG1107
CSG1112
PURE GREEN
LCD901 CAW1491

3.11 MD MECHANISM MODULE

D-a



D MAIN PCB

AUDIO (Lch)
FOCUS ERROR
TRACKING ERROR
CARRIAGE(SLED)
SPINDLE

RF LSI
IC101
1245730345

OPTICAL PICKUP ASSY

MECHANISM DRIVER
1C601
BA5985FM

DISK IN
DISC TD
LEAD IN
CSN1033
SW902, 903:
1245300030

SLIDE MOTOR
1246300073

SPINDLE MOTOR
1246300069

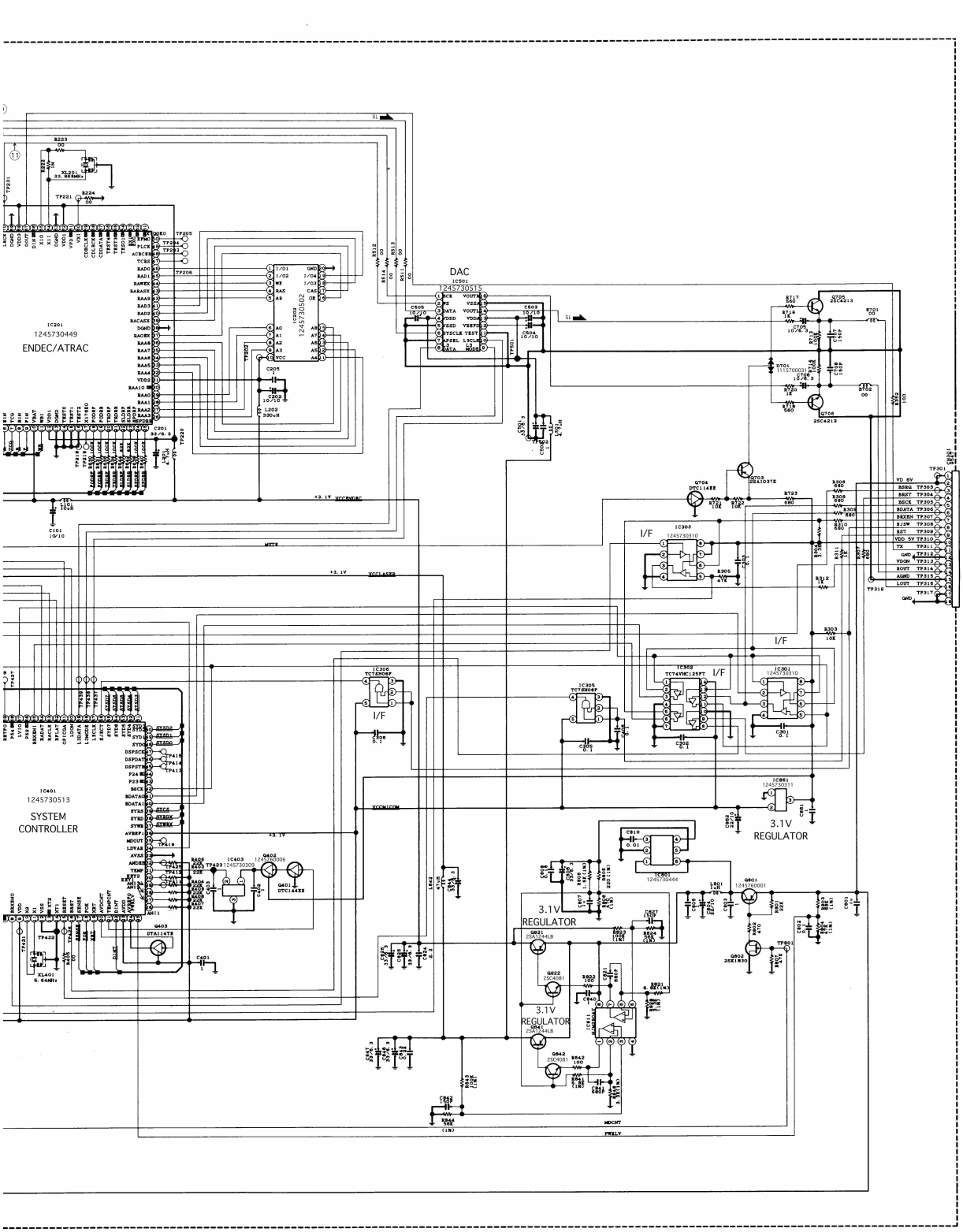
E SWITCH PCB
LOAD END
LOAD START
EJECT END

LOADING MOTOR
1246300043
SW651-653:1305301313

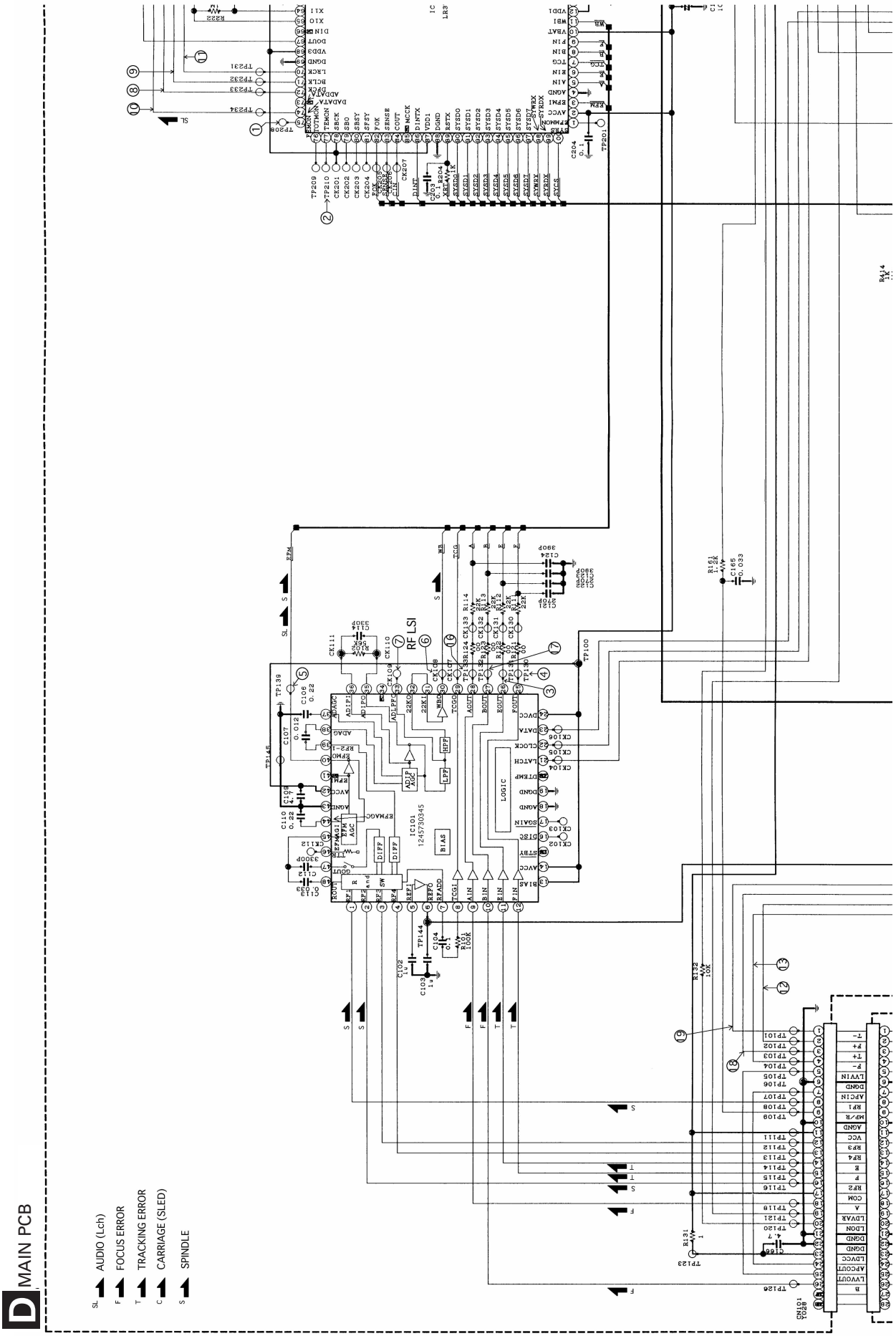
F MECHANISM PCB

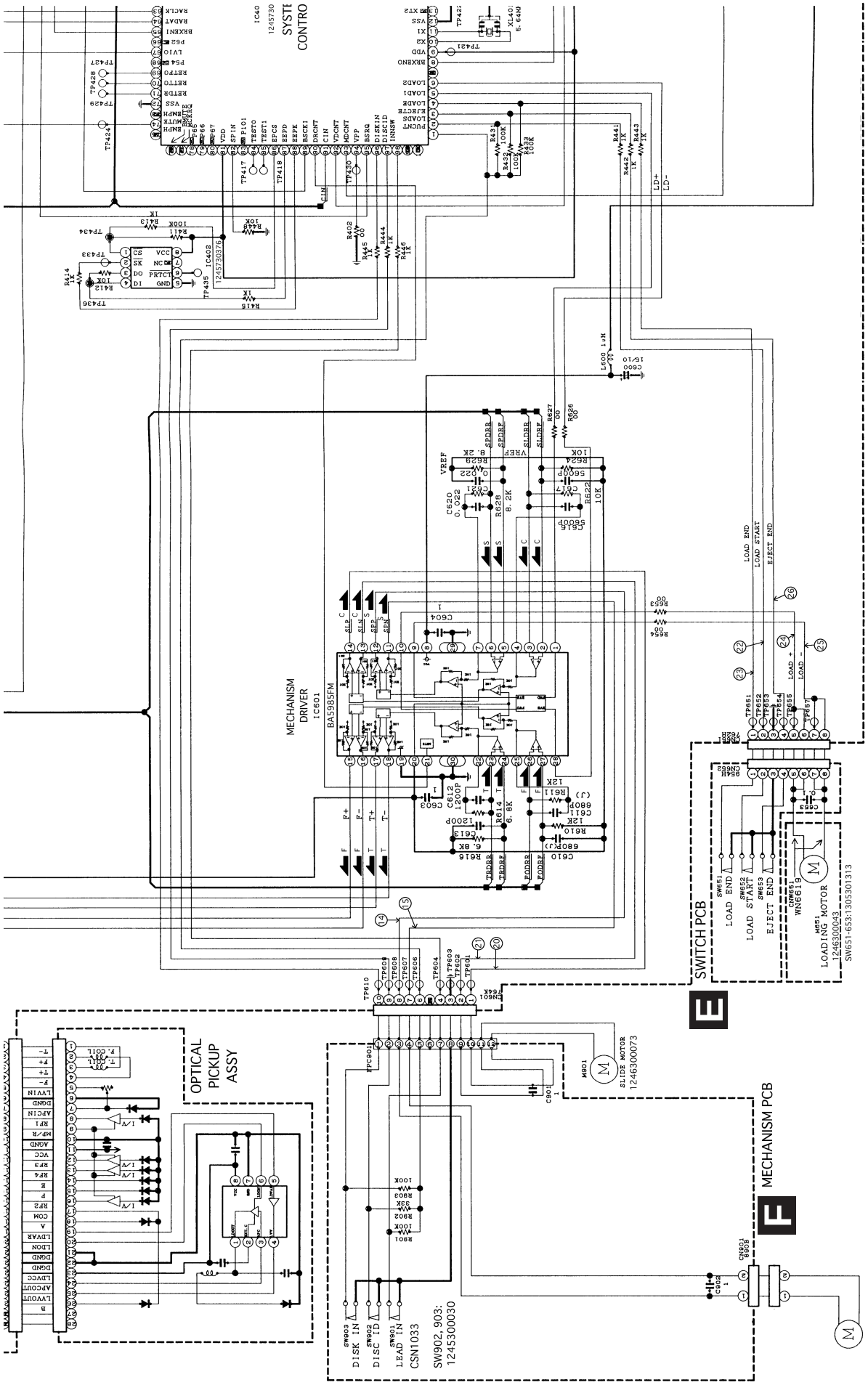
D E F

D-b

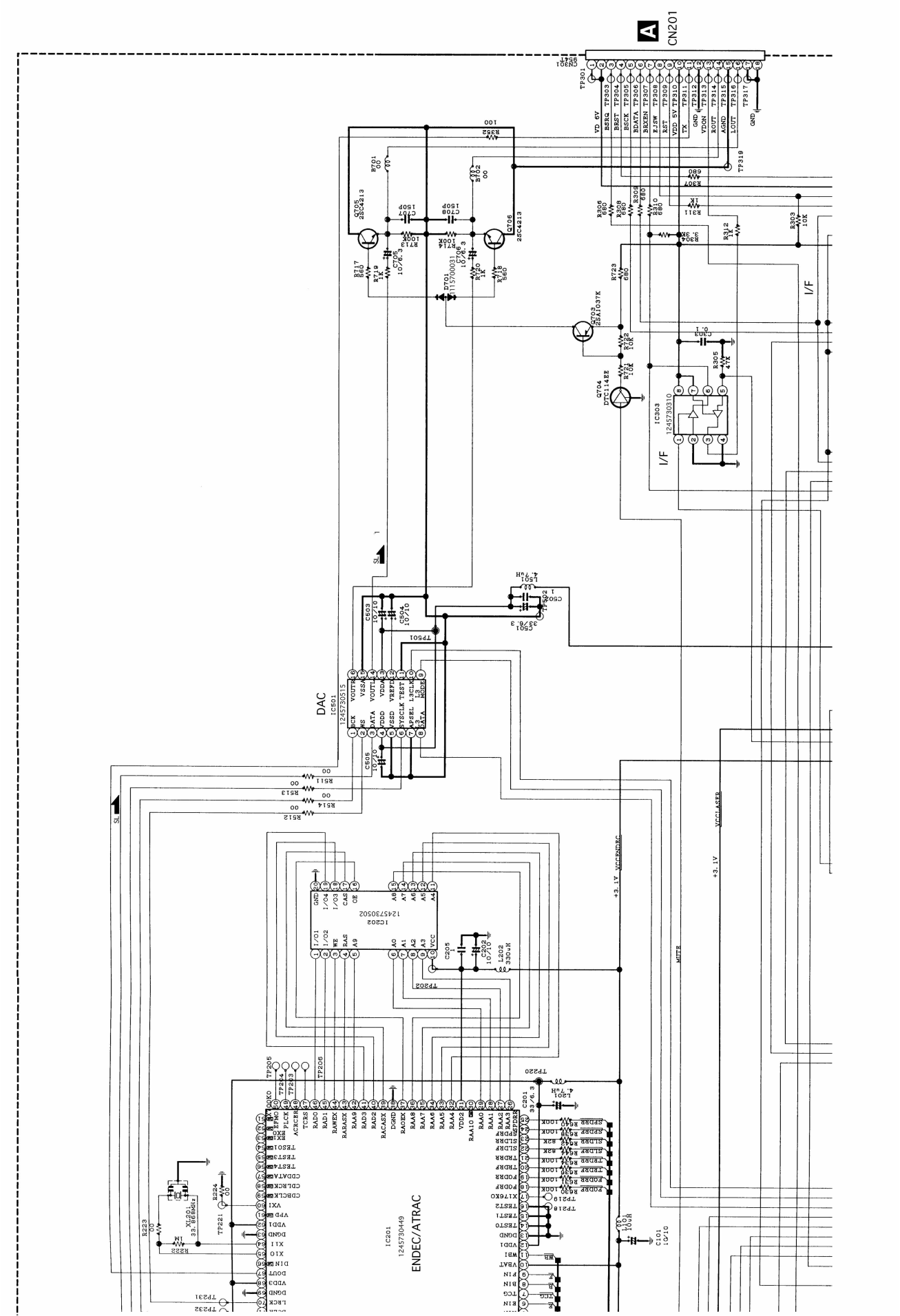

IC201
1245730449
ENDEC/ATRAC
DAC
IC501
1245730515
IC401
1245730513
SYSTEM
CONTROLLER
I/F
3.1V
REGULATOR
CN201

D-a D-b

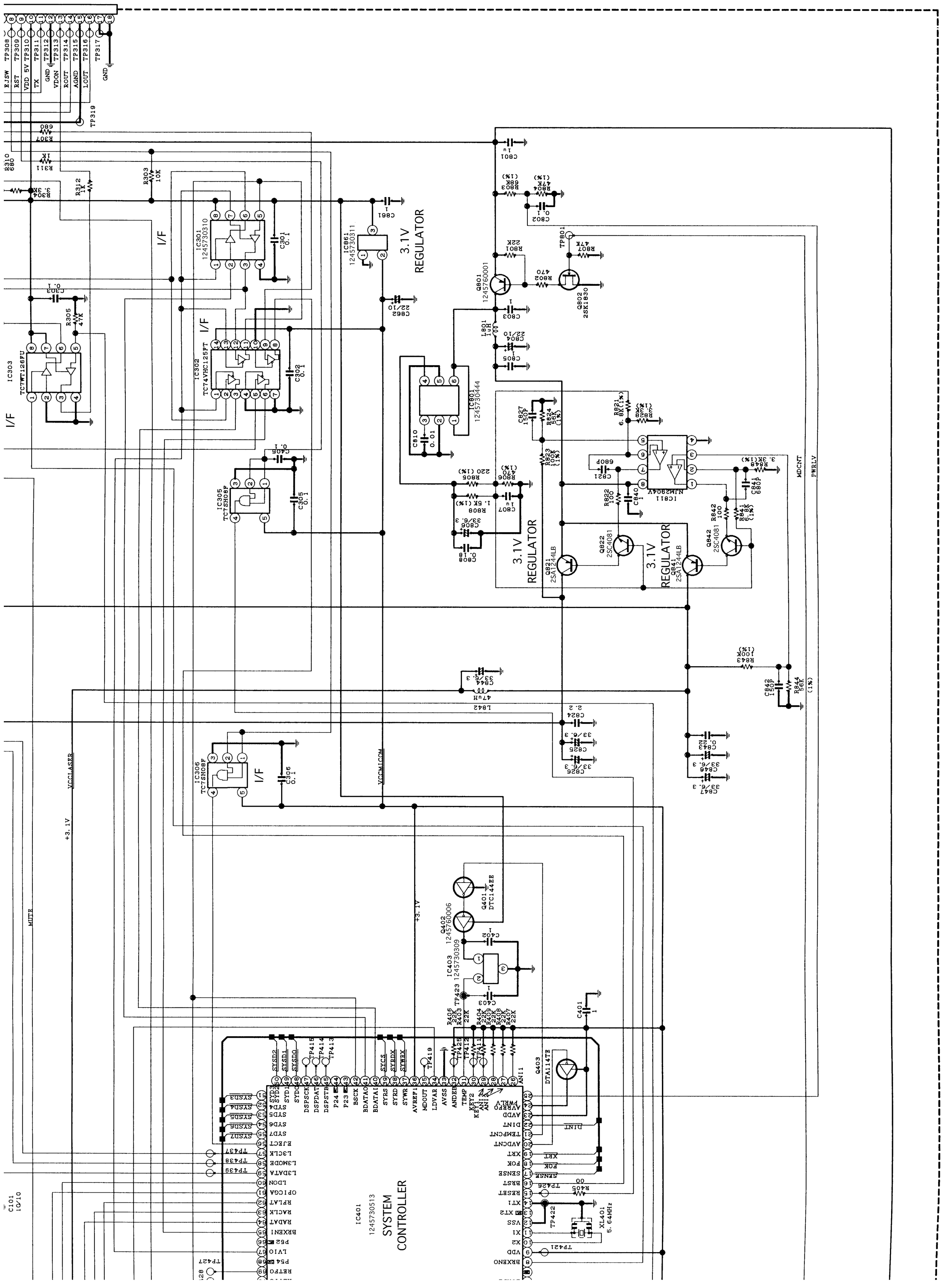

RF LSI
IC101
1245730345
LOGIC
MAIN PCB
AUDIO (Lch)
FOCUS ERROR
TRACKING ERROR
CARRIAGE (SLED)
SPINDLE


SYSTEM CONTRO
MECHANISM DRIVER IC601
BA5985FM
SWITCH PCB
LOAD END
LOAD START
EJECT END
LOADING MOTOR
1246300043
SW651-653:1305301313
OPTICAL PICKUP ASSY
MECHANISM PCB
SLIDE MOTOR
1246300073
SPINDLE MOTOR
1246300069
SW902, 903:
1245300030
CSN1033
DISK IN
DISC ID
LEAD IN

D-a D-b


CN201
DAC
IC501
ENDEC/ATRAC
IC201
I/F
IC303
IC202
MUTE
+3.1V
VCC1ASFB

A


EJSW TP308
RST TP309
VDD 5V TP310
TX TP311
GND TP312
VDON TP313
ROUT TP314
AGND TP315
LOUT TP316
TP317
GND
TP319
R307 680
R310 680
R311 1K
R304 3.3K
R312 1K
R303 10K
I/F
IC301 1245730310
C301 0.1
IC861 1245730311
C861 1
3.1V REGULATOR
C862 22/10
C303 0.1
R305 47K
IC303 TC7WT126FU
IC302 TC74VHC125FT
C302 0.1
C405 0.1
IC305 TC7SH08F
C305 0.1
IC306 TC7SH08F
C306 0.1
VCCLASER
VCCMICOM
+3.1V
MUTE
C801 1u
R803 68K (1%)
R804 47K (1%)
C802 0.1
TP801
R801 22K
R807 47K
Q801 1245760001
R802 470
Q802 2SK1830
C803 1
L801 1uH
C804 22/10
C805 1
IC801 1245730444
C810 0.01
R805 220 (1%)
R806 470 (1%)
R808 1.5K (1%)
C807 1u
C806 33/6.3
C808 0.18
C827 150P
R824 56K (1%)
R823 100K (1%)
R821 6.8K(1%)
R828 3.3K (1%)
C821 680P
R822 100
C840 1
IC811 NJM2904V
R848 3.3K(1%)
C841 680P
R842 100
R841 6.8K (1%)
Q822 2SC4081
Q842 2SC4081
Q821 2SA1244LB
Q841 2SA1244LB
MDCNT
PWRLV
R843 100K (1%)
C842 150P
R844 56K (1%)
C844 33/6.3
L842 47uH
C824 2.2
C825 33/6.3
C826 33/6.3
C843 0.22
C846 33/6.3
C847 33/6.3
Q401 DTC144EE
Q402 1245760006
C402 1
IC403 1245730309
TP423
C403 1
R406 22K
R403 22K
R404 22K
R409 22K
R408 22K
R407 22K
C401 1
Q403 DTA114TE
SYSD2 SYSD1 SYSD0
TP415 TP414 TP413
SYCS SYRDX SYWRX
TP419
TP425 TP412 TP411
IC401 1245730513
SYSTEM CONTROLLER
TP437 TP438 TP439
C101 10/10
TP427
DINT XRT FOK SENSE
TP426
R405 00
TP422
XL401 5.64MHz
TP421

B

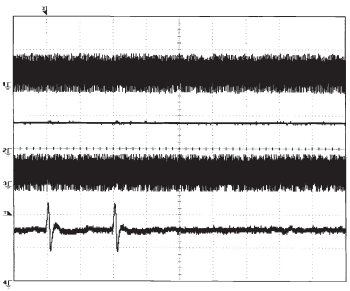
C

D

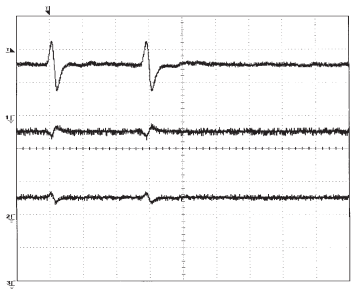
Note: The encircled numbers denote measuring pointes in the circuit diagram.

● Waveforms

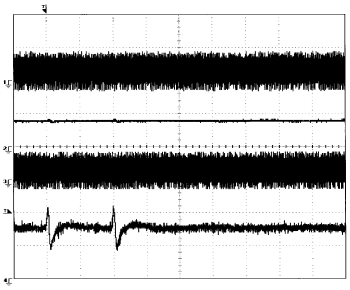
① CH1 : FEMON 5V/div 2ms/div
① CH2 : FEMON+LPF 2V/div 2ms/div
② CH3 : TEMON 5V/div 2ms/div
② CH4 : TEMON+LPF 2V/div 2ms/div
Normal mode : play
Disc : Recordable



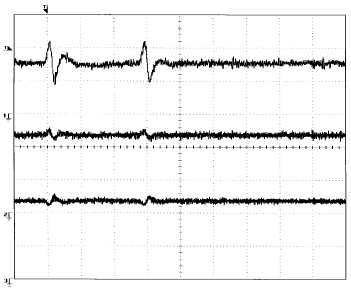
② CH1 : TEMON+LPF 1V/div 1ms/div
③ CH2 : E 500mV/div 1ms/div
④ CH3 : F 500mV/div 1ms/div
Normal mode : play
Disc : Recordable



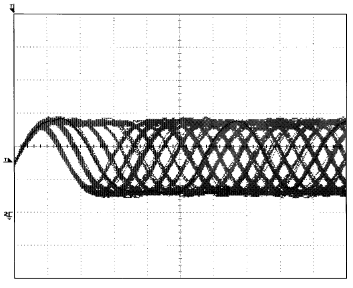
① CH1 : FEMON 1V/div 2ms/div
① CH2 : FEMON+LPF 500mV/div 2ms/div
② CH3 : TEMON 500mV/div 2ms/div
② CH4 : TEMON+LPF 500mV/div 2ms/div
Normal mode : play
Disc : Premastered



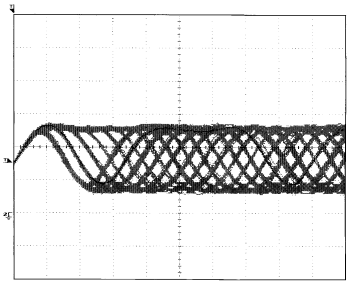
② CH1 : TEMON+LPF 1V/div 1ms/div
③ CH2 : E 500mV/div 1ms/div
④ CH3 : F 500mV/div 1ms/div
Normal mode : play
Disc : Premastered



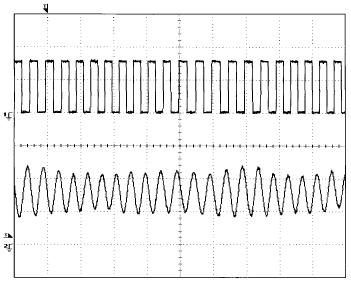
⑤ CH1 : EFM 1V/div 500ns/div
Test mode : play
Disc : Recordable



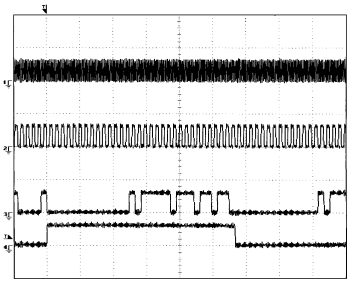
⑤ CH1 : EFM 1V/div 500ns/div
Test mode : play
Disc : Premastered



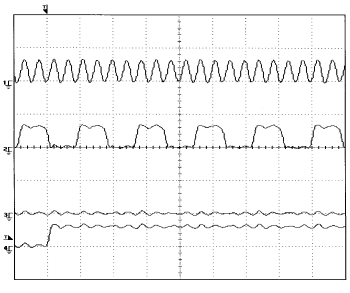
⑥ CH1 : WBO 2V/div 100ms/div
⑦ CH2 : ADLPFO 1V/div 100ms/div
Test mode : play
Disc : Recordable



⑧ CH1 : DFCK 5V/div 2ms/div
⑨ CH2 : BCLK 5V/div 2ms/div
⑩ CH3 : DADATA 5V/div 2ms/div
⑪ CH3 : LRCK 5V/div 2ms/div
Normal mode : play
Disc : Recordable

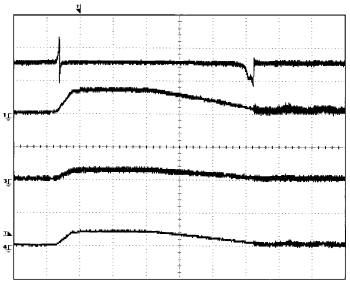


⑧ CH1 : DFCK 5V/div 200ns/div
⑨ CH2 : BCLK 5V/div 200ns/div
⑩ CH3 : DADATA 5V/div 200ns/div
⑪ CH4 : LRCK 5V/div 200ns/div
Normal mode : play
Disc : Recordable



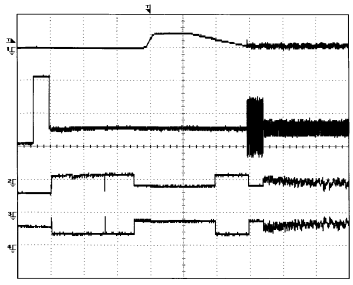
① CH1 : FEMON+LPF	1V/div	100ms/div
⑫ CH2 : F+	2V/div	100ms/div
⑬ CH3 : F-	2V/div	100ms/div
⑫⑬ CH4 : F+ - F-	2V/div	100ms/div

Focus close
Disc : Recordable



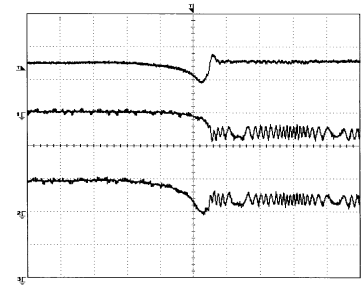
⑫⑬ CH1 : F+ - F-	2V/div	200ms/div
② CH2 : TEMON+LPF	1V/div	200ms/div
⑭ CH3 : SP+	2V/div	200ms/div
⑮ CH4 : SP-	2V/div	200ms/div

Focus close
Disc : Recordable



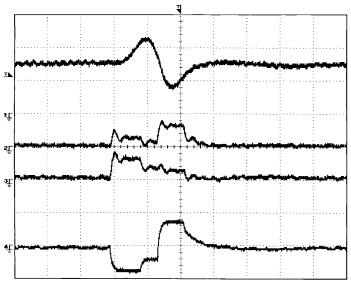
① CH1 : FEMON+LPF	1V/div	10ms/div
⑯ CH2 : A	500mV/div	10ms/div
⑰ CH3 : B	500mV/div	10ms/div

Focus close
Disc : Recordable



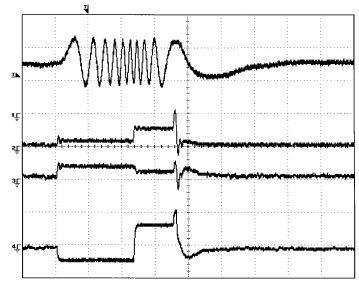
② CH1 : TEMON+LPF	1V/div	200ms/div
⑱ CH2 : T+	2V/div	200ms/div
⑲ CH3 : T-	2V/div	200ms/div
⑱⑲ CH4 : T+ - T-	2V/div	200ms/div

Test mode : 1T REV jump
Disc : Recordable



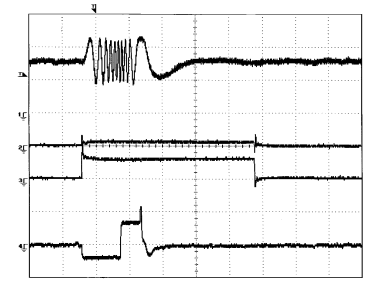
② CH1 : TEMON+LPF	1V/div	500ms/div
⑱ CH2 : T+	2V/div	500ms/div
⑲ CH3 : T-	2V/div	500ms/div
⑱⑲ CH4 : T+ - T-	2V/div	500ms/div

Test mode : 10T REV jump
Disc : Recordable



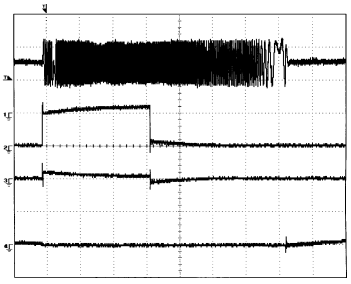
② CH1 : TEMON+LPF	1V/div	1ms/div
⑳ CH2 : SL+	2V/div	1ms/div
㉑ CH3 : SL-	2V/div	1ms/div
⑳㉑ CH4 : SL+ - SL-	2V/div	1ms/div

Test mode : 10T REV jump
Disc : Recordable



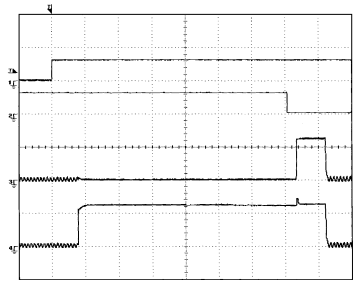
② CH1 : TEMON+LPF	1V/div	20ms/div
⑳ CH2 : SL+	2V/div	20ms/div
㉑ CH3 : SL-	2V/div	20ms/div
⑳㉑ CH4 : SL+ - SL-	2V/div	20ms/div

Test mode : 400T REV jump
Disc : Recordable



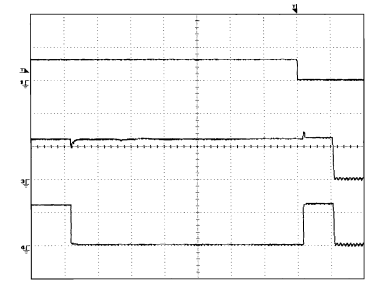
㉒ CH1 : LOADSTART	5V/div	200ms/div
㉓ CH2 : LOADEND	5V/div	200ms/div
㉔ CH3 : L+	5V/div	200ms/div
㉕ CH3 : L-	5V/div	200ms/div

Loading



㉖ CH1 : EJECTEND	5V/div	200ms/div
㉔ CH2 : L+	5V/div	200ms/div
㉕ CH3 : L-	5V/div	200ms/div

Eject

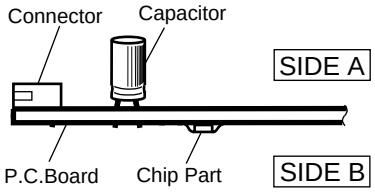


4. PCB CONNECTION DIAGRAM

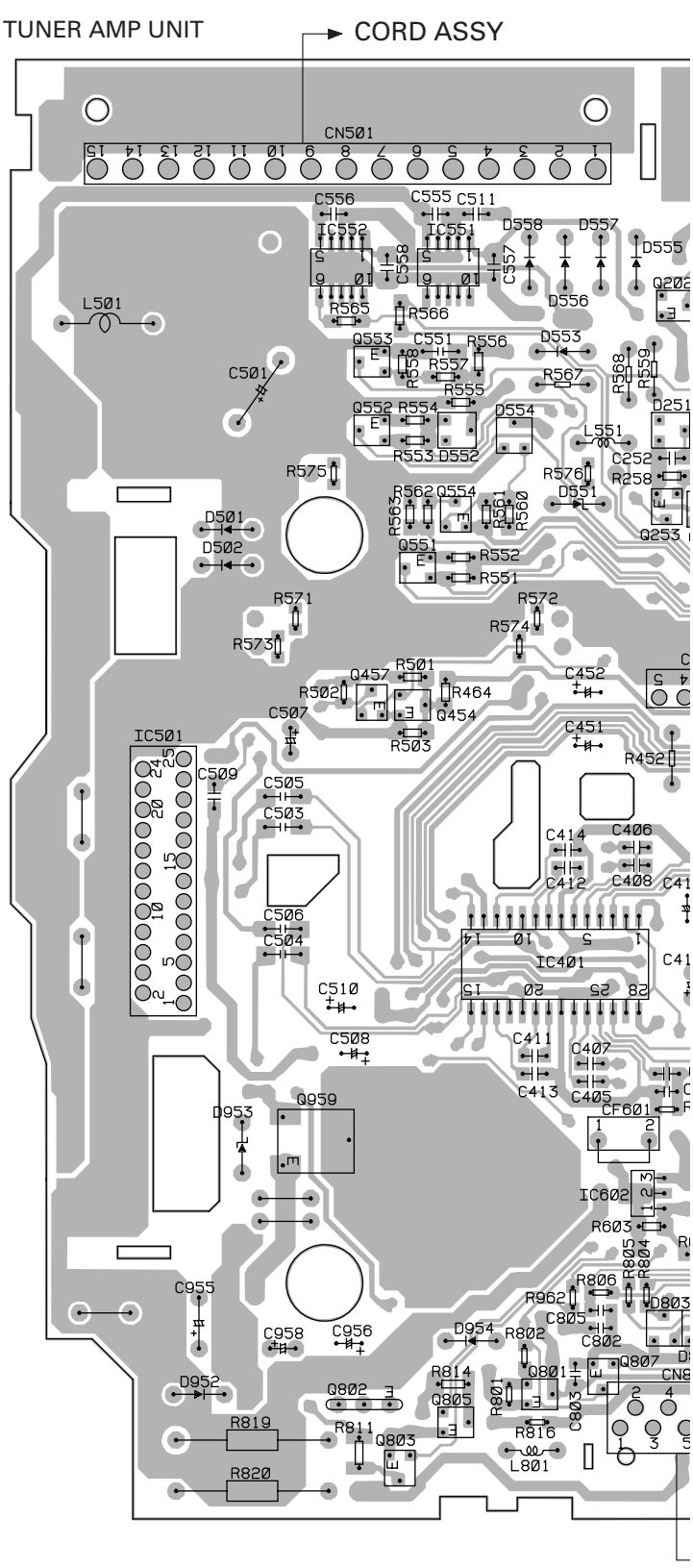
4.1 TUNER AMP UNIT

NOTE FOR PCB DIAGRAMS

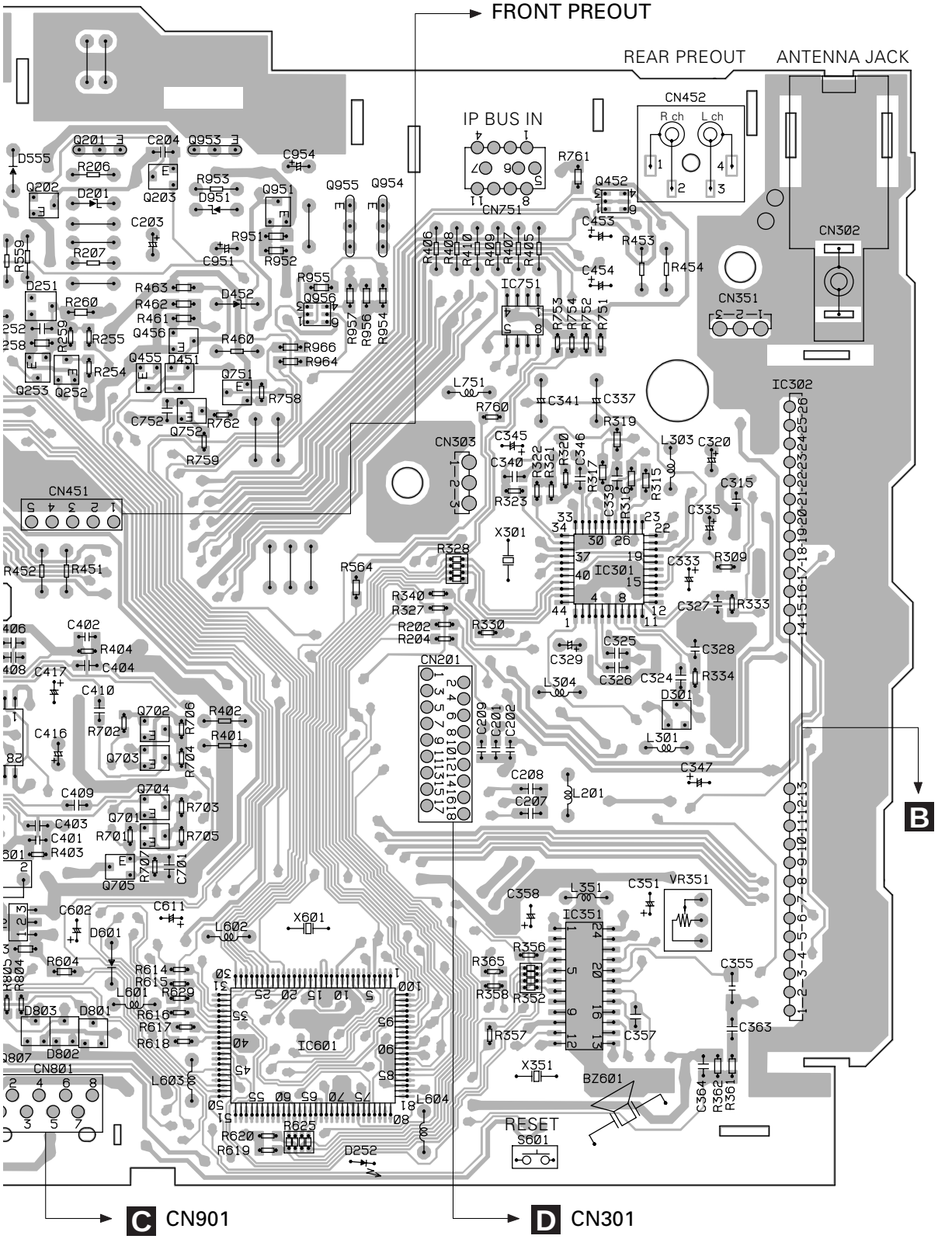
1. The parts mounted on this PCB include all necessary parts for several destination.
   For further information for respective destinations, be sure to check with the schematic diagram.
2. Viewpoint of PCB diagrams



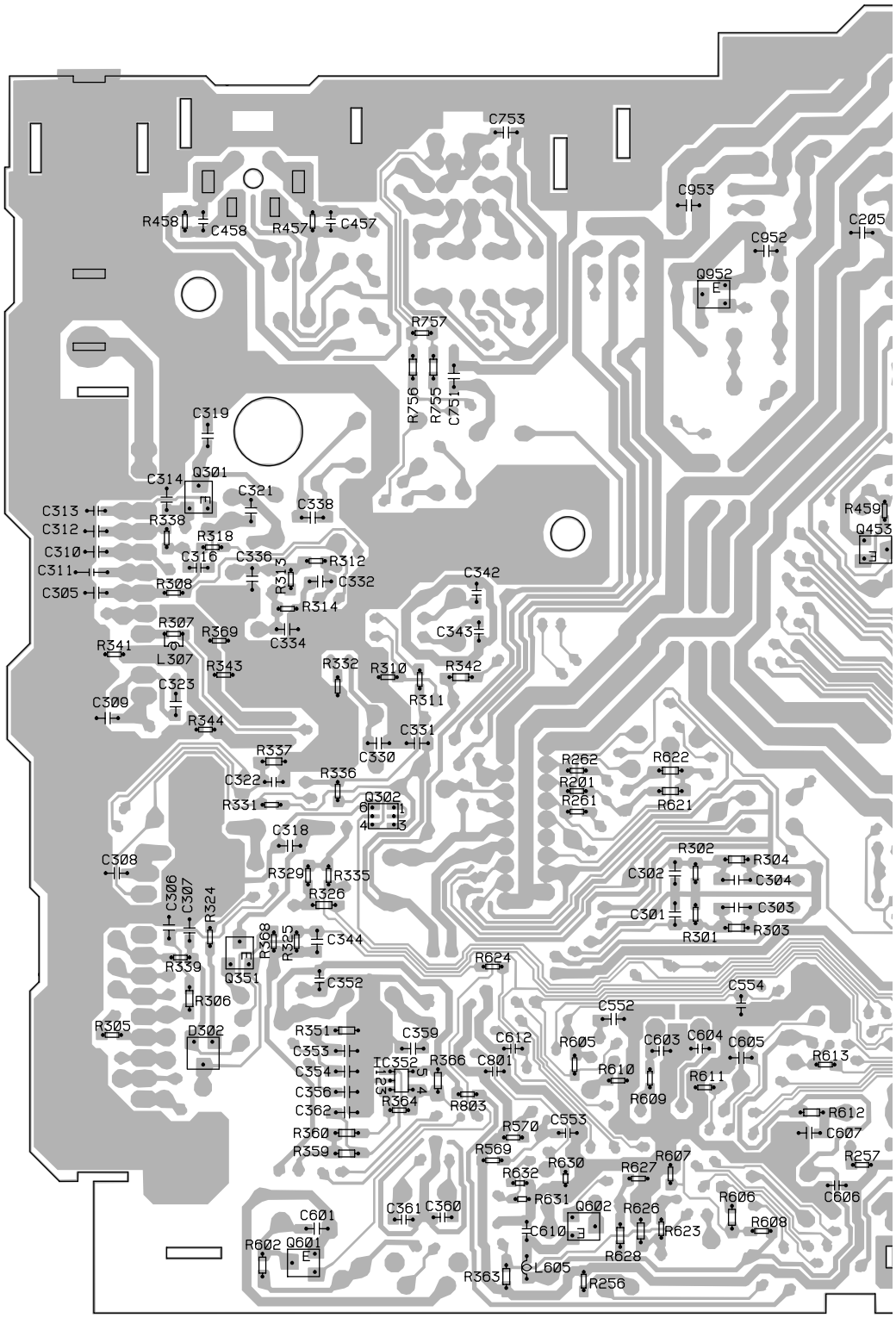
IC, Q	ADJ
Q201 Q953	
IC552 IC551	
Q452	
Q955 Q954	
Q202 Q203 Q951	
Q553	
Q552 IC751	
Q956	
Q456	
Q554 Q455	
Q751	
Q252 IC302	
Q253 Q551	
Q752	
Q457	
Q454	
IC501	
IC301	
Q702	
IC401	
Q703	
Q704	
Q701	
Q959	
IC602 Q705	VR351
IC351	
IC601	
Q807	
Q801	
Q802 Q805	
Q803	



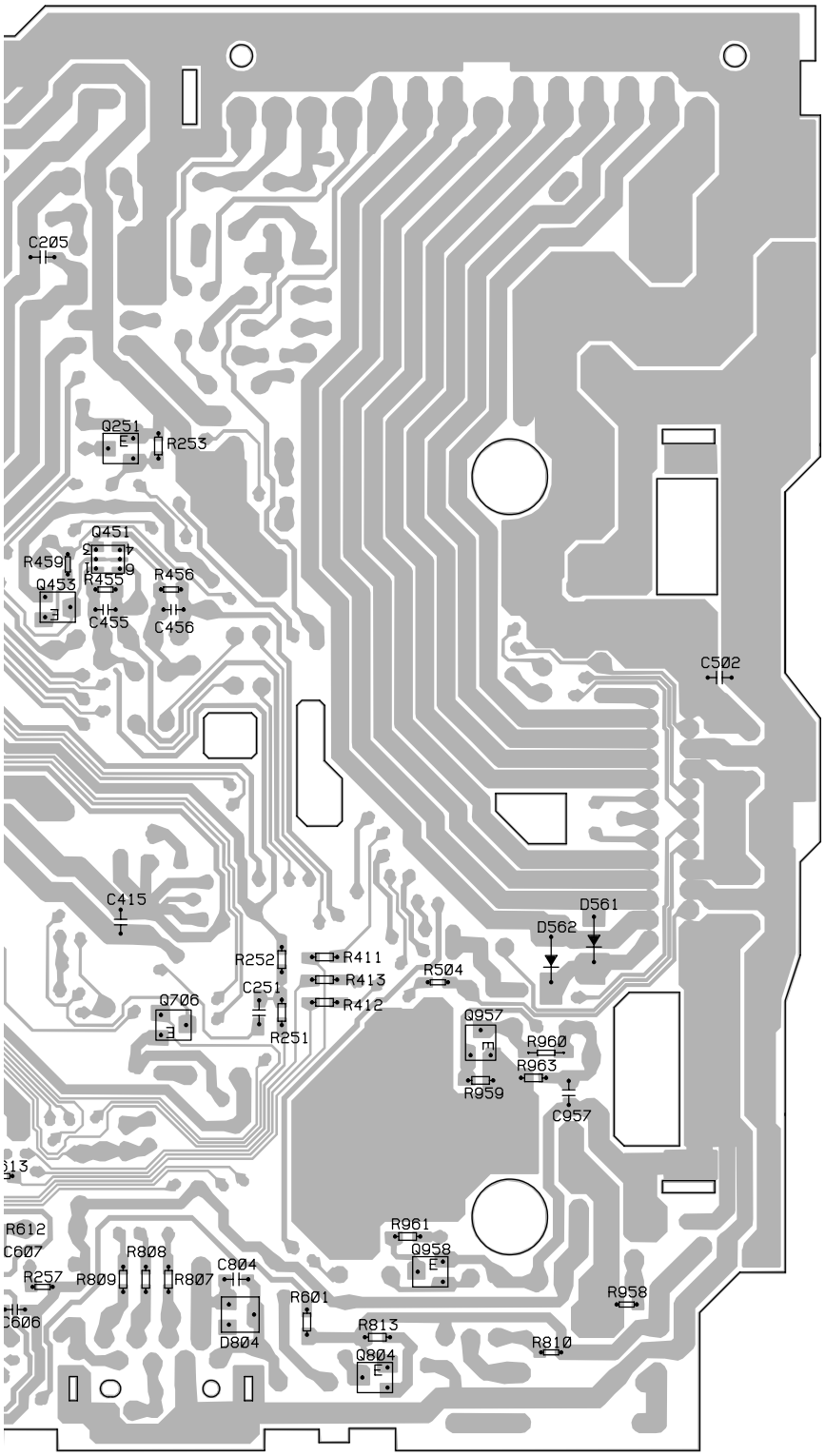
SIDE A


FRONT PREOUT
REAR PREOUT
ANTENNA JACK
IP BUS IN
CN452
R ch
L ch
CN751
CN302
CN351
IC751
IC302
IC301
IC351
IC601
CN303
CN451
CN201
X301
X601
X351
VR351
BZ601
RESET
S601
CN801
CN901
CN301
B
C
D

A TUNER AMP UNIT



SIDE B



IC, Q

Q952

Q251

Q301
Q451

Q453

Q302

Q706
Q957

Q351

IC352

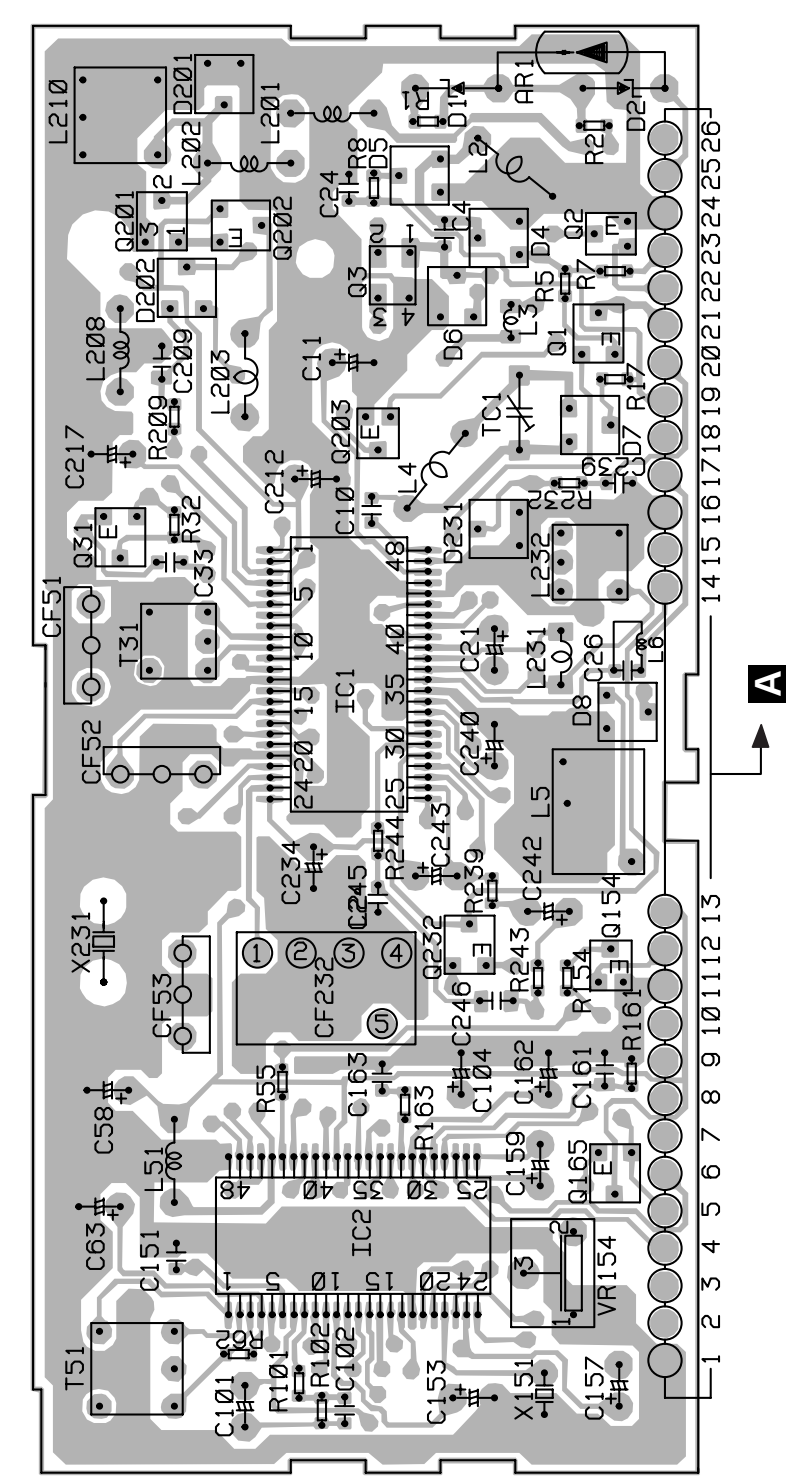
Q958

Q602
Q804
Q601

A B C D

4.2 FM/AM TUNER UNIT

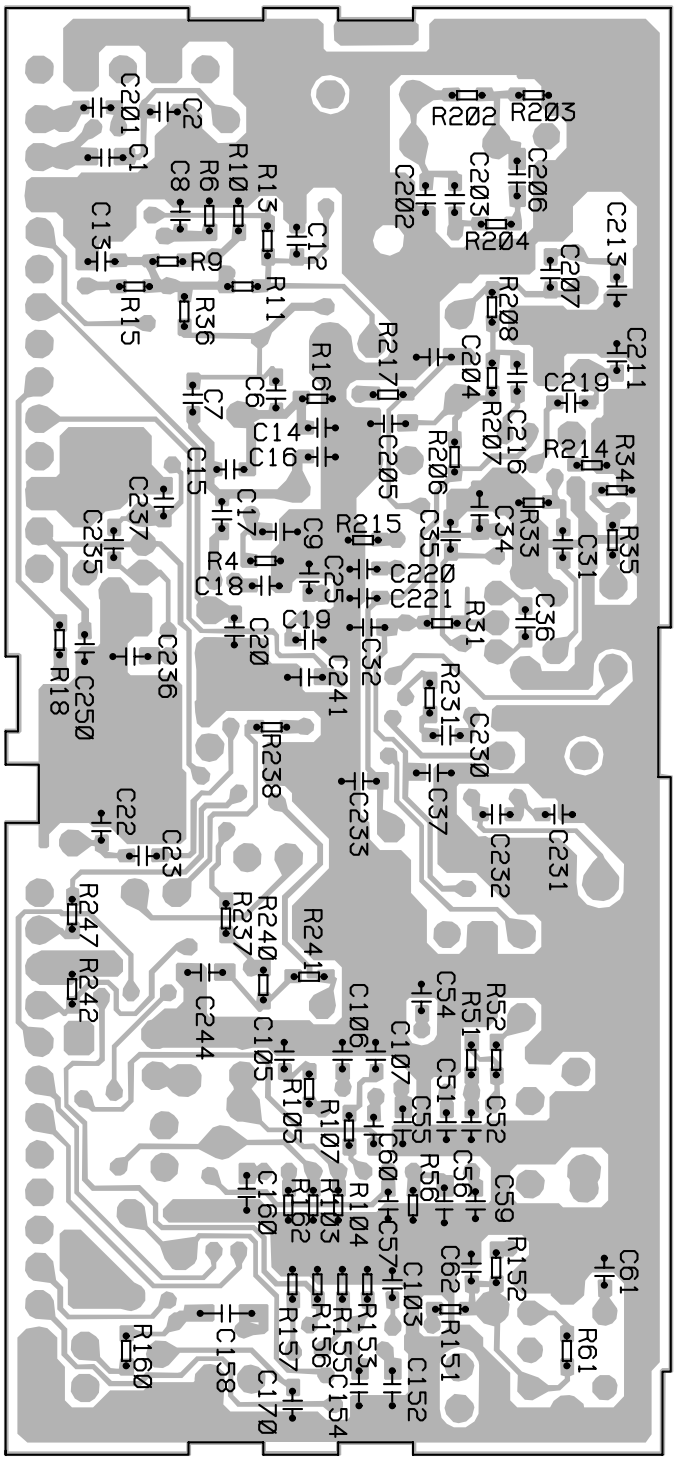
SIDE A



IC, Q	ADJ
Q31	T51
Q201	T31
Q202	L4
Q203 Q3 IC1 IC2 Q232	L2 TC1
Q1 Q2 Q154 Q165	L5 VR154

FM/AM TUNER UNIT

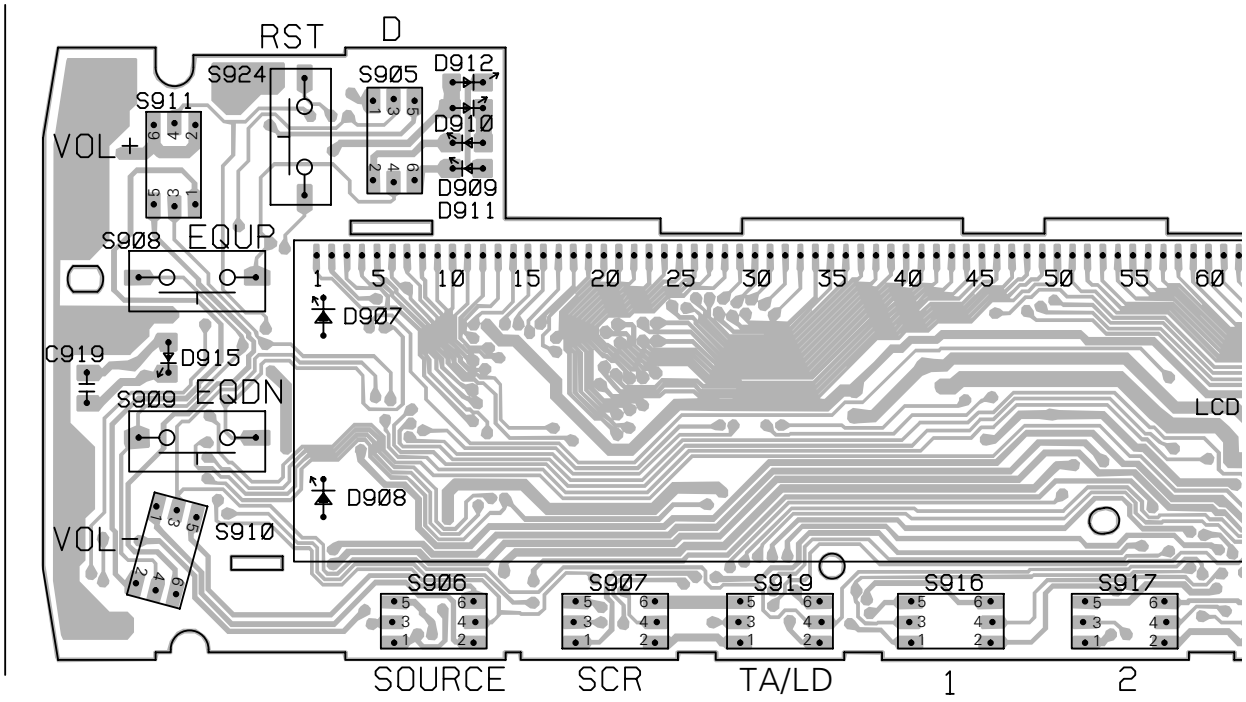
SIDE B



B FM/AM TUNER UNIT

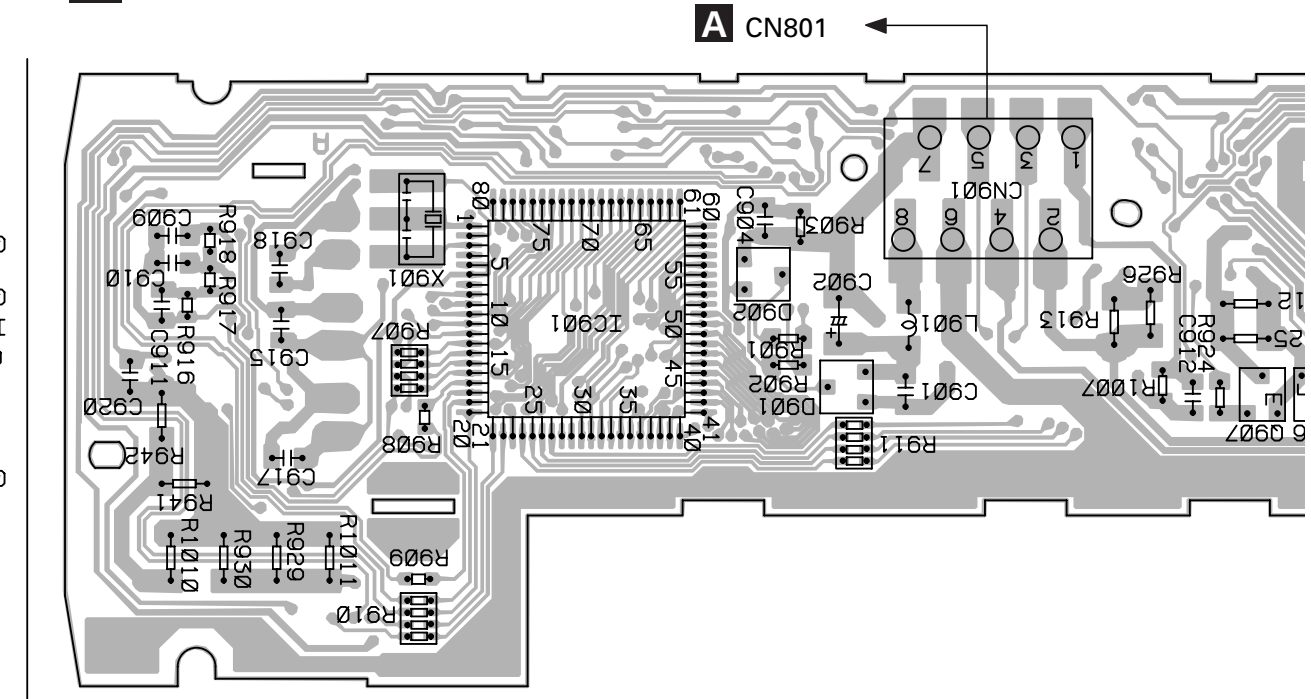
4.3 KEYBOARD UNIT

C KEYBOARD UNIT

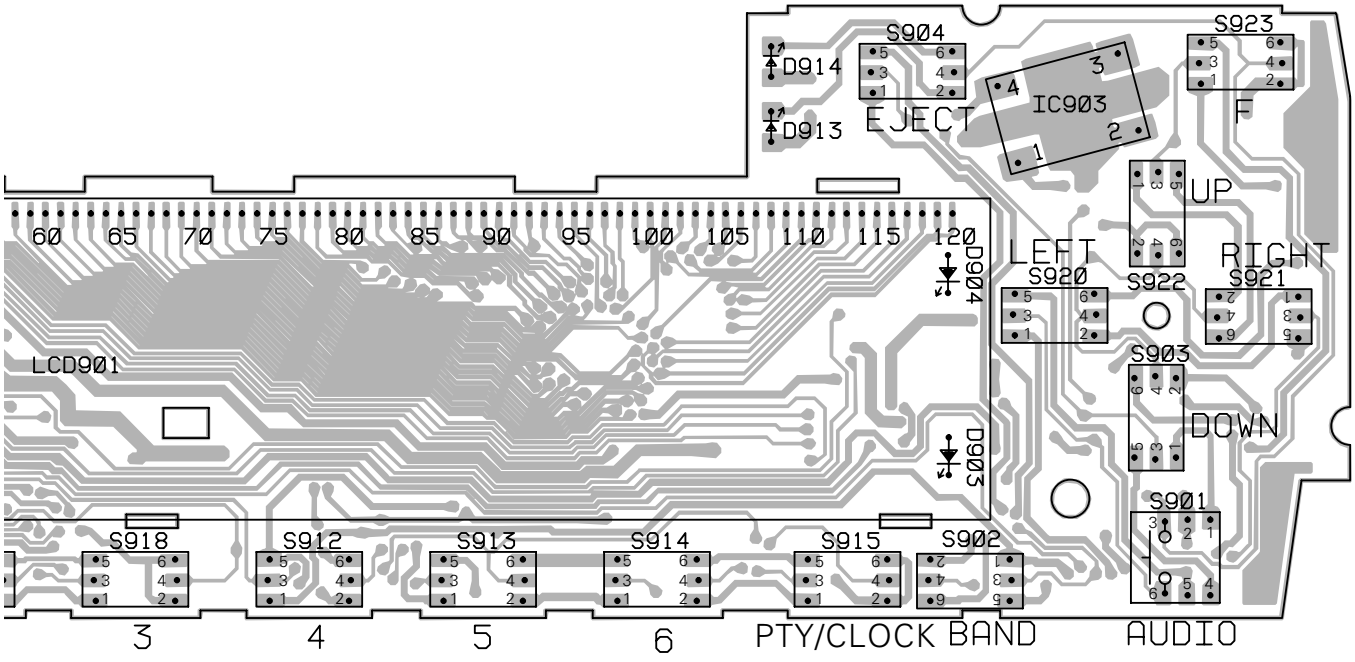


C KEYBOARD UNIT

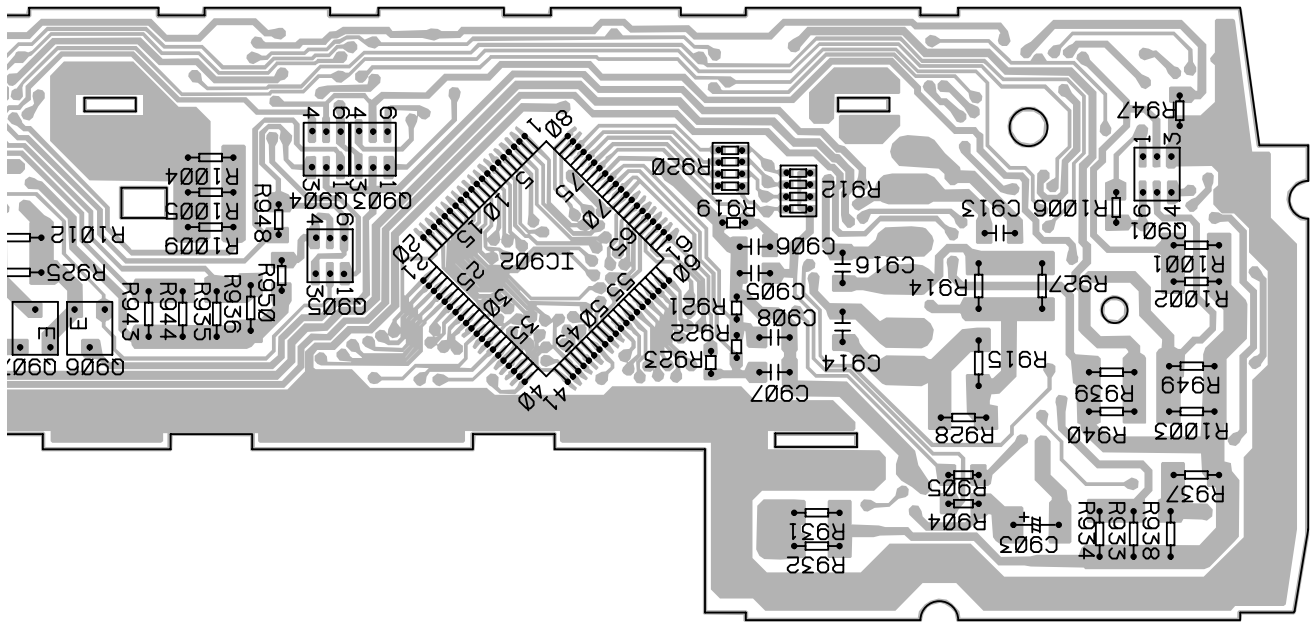
A CN801



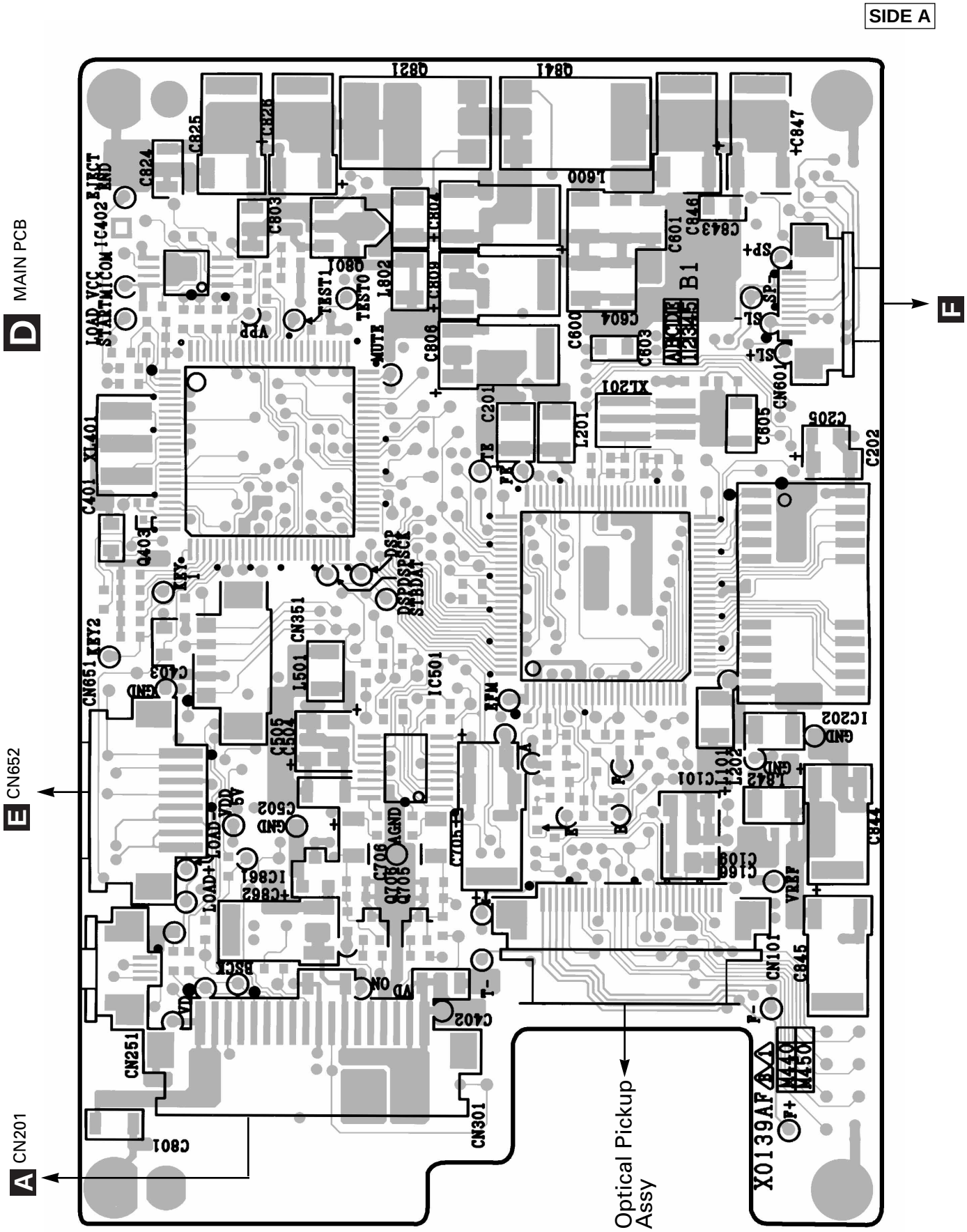
SIDE A

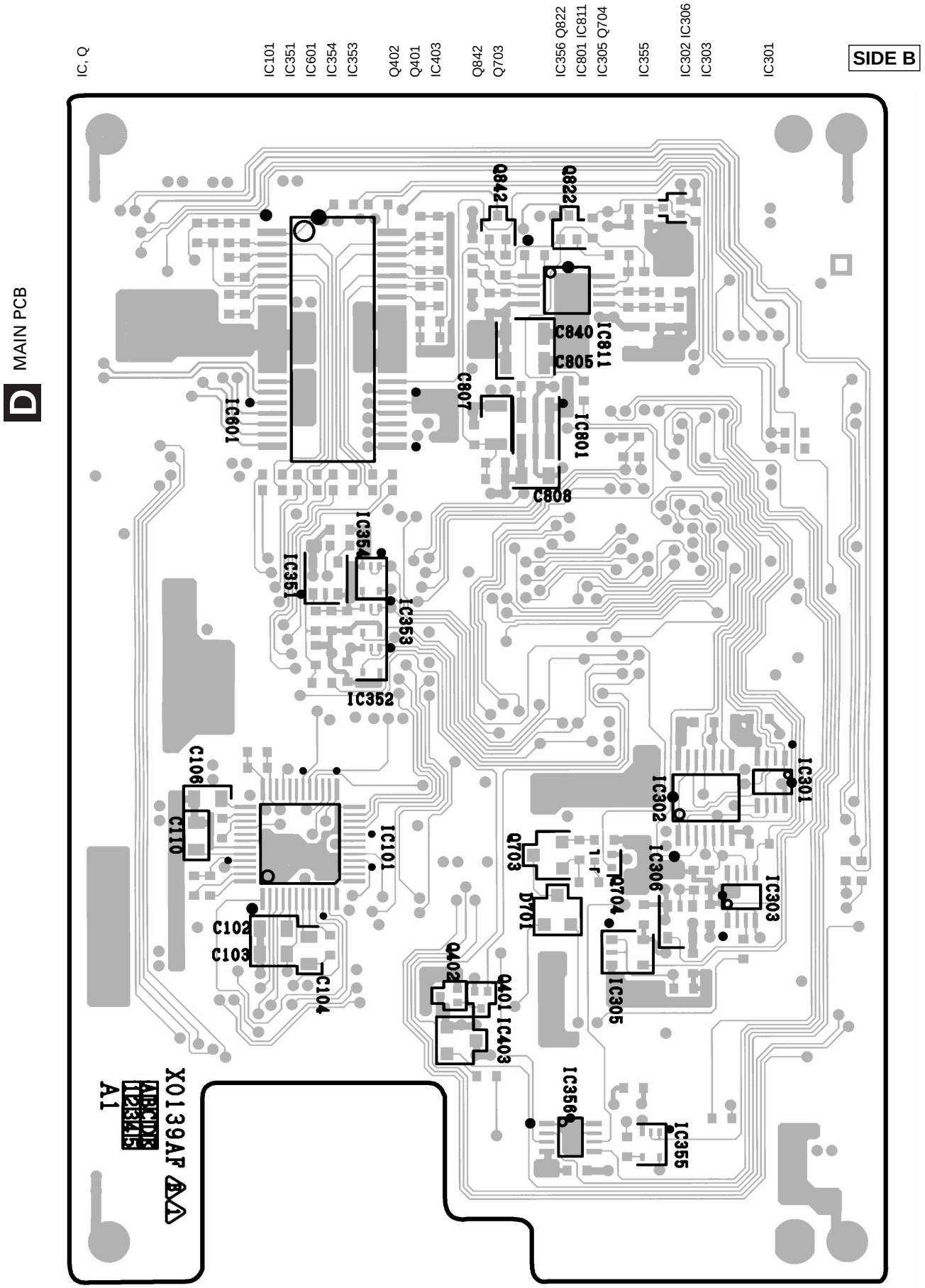

S904
D914
D913
EJECT
IC903
S923
F
UP
LEFT
RIGHT
S920
S922
S921
S903
DOWN
S901
D904
D903
LCD901
60 65 70 75 80 85 90 95 100 105 110 115 120
S918
S912
S913
S914
S915
S902
3 4 5 6
PTY/CLOCK BAND
AUDIO

SIDE B

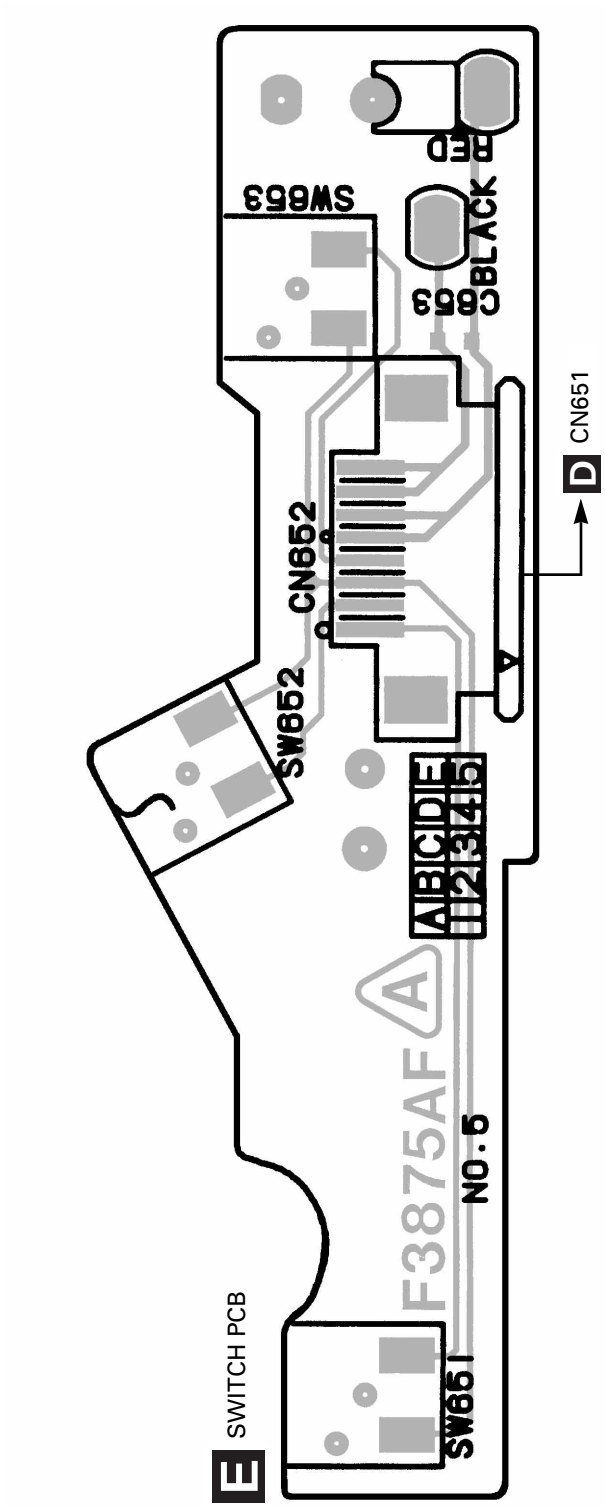

IC902
R947
R920
R919
R912
C906
C916
C905
C908
C914
C907
R914
R927
R915
R928
R939
R940
R949
R1003
R937
R938
R934
R932
R931
R905
R904
C903
R1006
C913
Q901
R1001
R1002
R948
R950
R936
R935
R944
R943
R925
R1012
R1004
R1005
R1009
Q906
Q907
Q903
Q904
Q905

4.4 MAIN PCB


SIDE A
MAIN PCB
CN652
CN201
Optical Pickup Assy
IC, Q
Q403
IC402
IC401
IC861
Q801
Q821
Q706
Q705
IC501
Q841
IC201
IC202

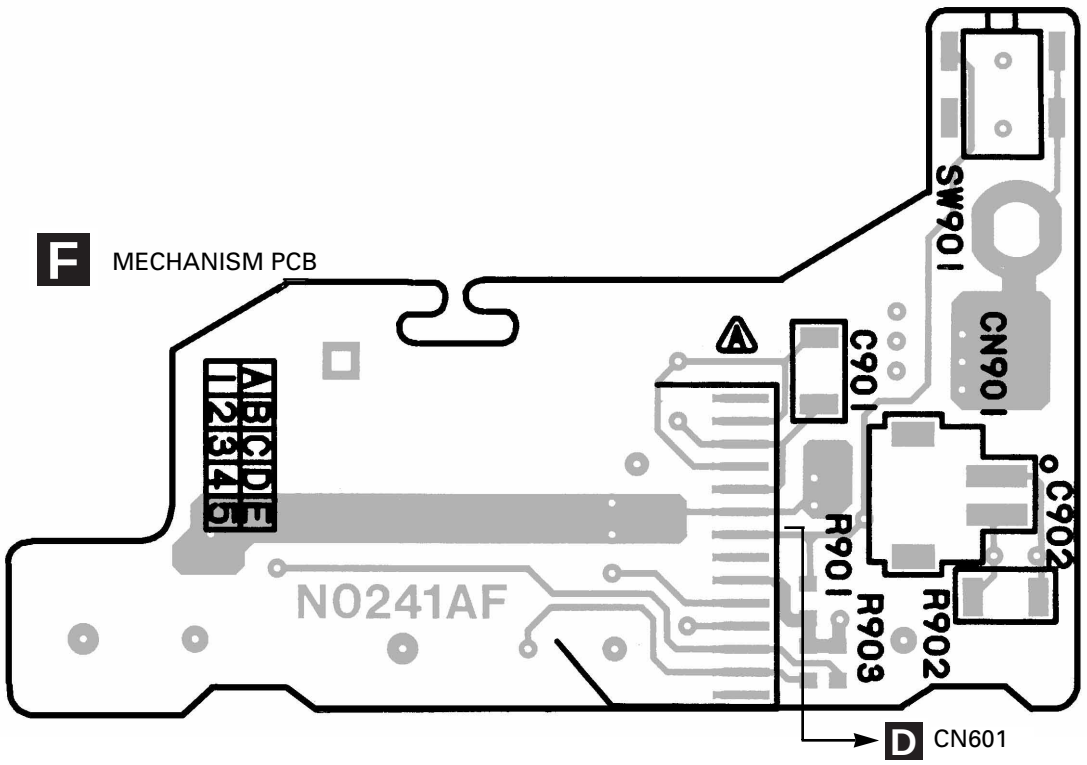

IC, Q
IC101
IC351
IC601
IC354
IC353
Q402
Q401
IC403
Q842
Q703
IC356 Q822
IC801 IC811
IC305 Q704
IC355
IC302 IC306
IC303
IC301
SIDE B
MAIN PCB
D
Q842
Q822
C840
IC811
C805
C807
IC601
IC801
C808
IC354
IC351
IC353
IC352
C106
C110
IC101
C102
C103
C104
Q703
Q701
IC302
IC301
IC306
Q704
IC303
IC305
Q402
Q401
IC403
IC356
IC355
X0139AF
A1

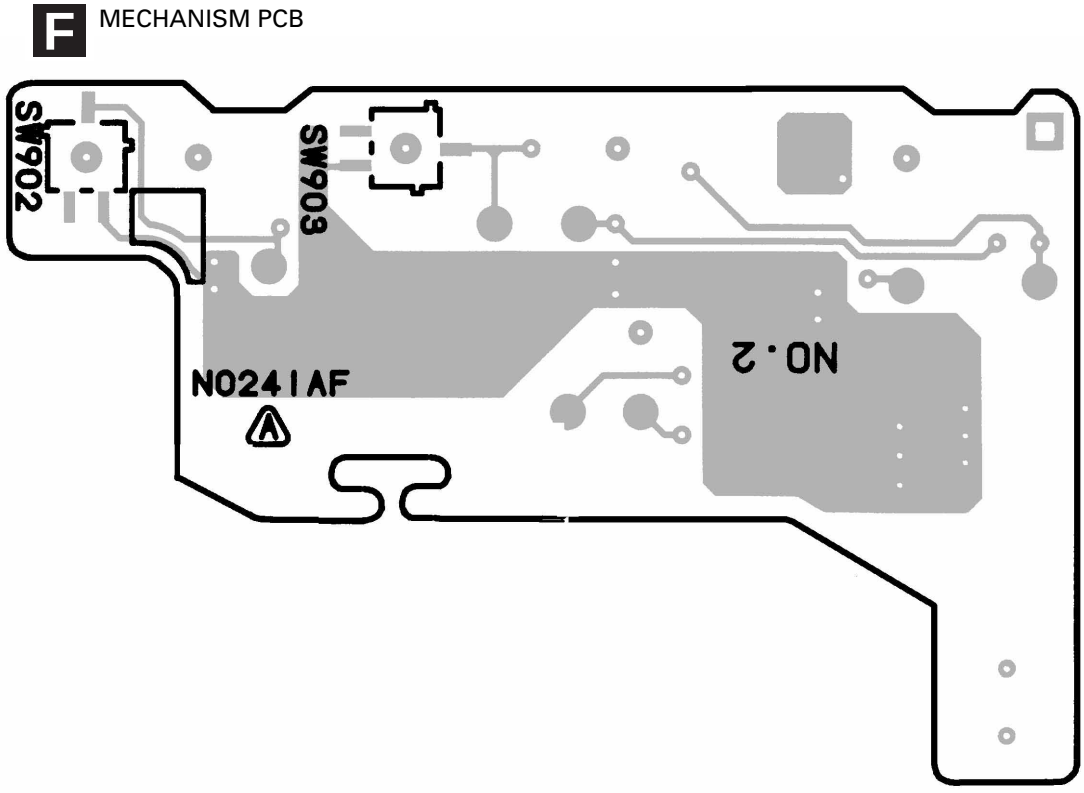
4.5 SWITCH PCB



4.6 MECHANISM PCB

SIDE A





5. ELECTRICAL PARTS LIST

NOTE:

- Parts whose parts numbers are omitted are subject to being not supplied.
- The part numbers shown below indicate chip components.

Chip Resistor

RS1/○S○○○J,RS1/○○S○○○J

Chip Capacitor (except for CQS.....)

CKS....., CCS....., CSZS.....

A Unit Number : CWM6570(MEH-P5000RII/EW)
Unit Name : Tuner Amp Unit

MISCELLANEOUS

=====Circuit Symbol & No.		===Part Name	Part No.
IC	301	IC	PM2007A
IC	351	IC	PMW001B
IC	352	IC	TA75S393F
IC	401	IC	PML003AM
IC	501	IC	PAL005A
IC	601	IC	PD4960B
IC	602	IC	S-80734ANDYI
IC	751	IC	CA0008AM
Q	201	Transistor	2SD2396
Q	202	Transistor	DTA114EK
Q	203	Transistor	DTC124EK
Q	251	Transistor	2SA1037K
Q	252	Transistor	DTC124EK
Q	253	Transistor	2SC2412K
Q	301	Transistor	2SC2412K
Q	302	Transistor	IMD2A
Q	351	Transistor	2SC2412K
Q	451	Transistor	IMH3A
Q	452	Transistor	IMH3A
Q	453	Transistor	DTA124EK
Q	455	Transistor	DTC124EK
Q	456	Transistor	2SC2412K
Q	457	Transistor	DTC124EK
Q	551	Transistor	2SC2412K
Q	552	Transistor	2SC2412K
Q	553	Transistor	2SC2412K
Q	554	Transistor	2SA1037K
Q	601	Transistor	DTC124EK
Q	602	Transistor	DTA114EK
Q	701	Transistor	2SD1757K
Q	702	Transistor	2SD1757K
Q	703	Transistor	DTC143TK
Q	704	Transistor	DTC143TK
Q	705	Transistor	2SC2412K
Q	706	Transistor	DTA114EK
Q	751	Transistor	2SA1037K
Q	752	Transistor	DTC114EK
Q	801	Transistor	2SA1037K
Q	802	Transistor	2SB1243
Q	803	Transistor	DTC143EK
Q	804	Transistor	2SA1037K
Q	805	Transistor	DTC114EK
Q	807	Transistor	DTC124EK
Q	951	Transistor	2SA1037K
Q	952	Transistor	DTC114EK
Q	953	Transistor	2SD2396
Q	954	Transistor	2SA1048
Q	955	Transistor	2SA1048
Q	956	Transistor	IMH1A
Q	957	Transistor	2SA1037K

=====Circuit Symbol & No.		===Part Name	Part No.
Q	958	Transistor	DTC124EK
Q	959	Transistor	2SD1760F5
D	201	Diode	HZS7L(A3)
D	251	Diode	MA3150(M)
D	252	LED	BR4361F
D	301	Chip Diode	MA151K
D	302	Chip Diode	MA151K
D	451	Chip Diode	MA151WK
D	452	Diode	HZS9L(A2)
D	501	Diode	ERA15-02
D	502	Diode	ERA15-02
D	551	Diode	HZS7L(C2)
D	552	Diode	MA3062(M)
D	553	Diode	ERA15-02
D	554	Chip Diode	MA151WK
D	556	Diode	ERA15-02
D	558	Diode	ERA15-02
D	601	Diode	1SS270
D	801	Diode	MA153
D	802	Diode	MA153
D	803	Diode	MA153
D	804	Diode	MA3062(M)
D	951	Diode	HZS9L(B3)
D	952	Diode	ERA15-02
D	953	Diode	HZS6L(B2)
D	954	Diode	1SS270
L	201	Ferri-Inductor	LAU2R2K
L	301	Ferri-Inductor	LAU2R2K
L	303	Ferri-Inductor	LAU2R2K
L	304	Ferri-Inductor	LAU2R2K
L	351	Ferri-Inductor	LAU101K
L	501	Choke Coil 600mH	CTH1226
L	551	Ferri-Inductor	LAU2R2K
L	601	Ferri-Inductor	LAU2R2K
L	602	Ferri-Inductor	LAU2R2K
L	603	Ferri-Inductor	LAU2R2K
L	604	Ferri-Inductor	LAU2R2K
L	605	Inductor	LCTB2R2K2125
L	751	Ferri-Inductor	LAU2R2K
L	801	Ferri-Inductor	LAU2R2K
CF	601	Filter	CTF1071
X	301	Crystal Resonator 7.200MHz	CSS1379
X	351	Crystal Resonator 4.332MHz	CSS1056
X	601	Radiator 12.58291MHz	CSS1402
S	601	Switch(RESET)	CSG1046
VR	351	Semi-fixed 22kΩ(B)	CCP1321
		FM/AM Tuner Unit	CWE1416
BZ	601	Buzzer	CPV1011

RESISTORS

R	201		RS1/10S221J
R	202		RS1/10S221J
R	204		RS1/10S221J
R	206		RD1/4PU221J
R	207		RD1/4PU162J

=====Circuit Symbol & No.===Part Name			Part No.	=====Circuit Symbol & No.===Part Name			Part No.
R	251		RS1/10S103J	R	401		RD1/4PU751J
R	252		RS1/10S102J	R	402		RD1/4PU751J
R	253		RS1/10S223J	R	405		RD1/4PU181J
R	254		RS1/10S223J	R	406		RD1/4PU181J
R	255		RS1/10S103J	R	407		RD1/4PU223J
R	256		RS1/10S751J	R	408		RD1/4PU223J
R	257		RS1/10S473J	R	409		RD1/4PU102J
R	258		RS1/10S272J	R	410		RD1/4PU102J
R	259		RS1/10S223J	R	411		RS1/10S102J
R	260		RS1/8S102J	R	412		RS1/10S102J
R	261		RS1/10S221J	R	413		RS1/10S102J
R	262		RS1/10S221J	R	451		RD1/4PU821J
R	301		RS1/10S272J	R	452		RD1/4PU821J
R	302		RS1/10S272J	R	453		RD1/4PU821J
R	305		RS1/10S0R0J	R	454		RD1/4PU821J
R	306		RS1/10S102J	R	455		RS1/10S223J
R	307		RS1/10S0R0J	R	456		RS1/10S223J
R	308		RS1/10S102J	R	457		RS1/10S223J
R	309		RS1/10S222J	R	458		RS1/10S223J
R	310		RS1/10S473J	R	460		RD1/4PU182J
R	311		RS1/10S0R0J	R	461		RS1/10S103J
R	312		RS1/10S222J	R	462		RS1/10S223J
R	313		RS1/10S472J	R	463		RS1/10S103J
R	314		RS1/10S682J	R	464		RS1/10S103J
R	315		RS1/10S682J	R	501		RS1/10S221J
R	316		RS1/10S472J	R	502		RS1/10S101J
R	317		RS1/10S561J	R	503		RS1/10S153J
R	318		RS1/10S103J	R	504		RS1/10S103J
R	319		RS1/10S222J	R	551		RS1/10S223J
R	320		RS1/10S152J	R	552		RS1/10S473J
R	321		RS1/10S392J	R	553		RS1/10S223J
R	322		RS1/10S392J	R	554		RS1/10S473J
R	323		RS1/10S272J	R	555		RS1/10S472J
R	324		RS1/10S103J	R	556		RS1/10S103J
R	325		RS1/10S393J	R	557		RS1/10S103J
R	326		RS1/10S222J	R	558		RS1/10S473J
R	327		RS1/10S681J	R	559		RD1/4PU153J
R	328		RA4C681J	R	560		RS1/10S472J
R	329		RS1/10S473J	R	561		RS1/10S472J
R	330		RS1/10S222J	R	562		RS1/10S102J
R	331		RS1/10S562J	R	563		RS1/10S473J
R	332		RS1/10S0R0J	R	564		RS1/10S473J
R	333		RS1/10S102J	R	567		RD1/4PU102J
R	334		RS1/10S222J	R	568		RD1/4PU102J
R	335		RS1/10S473J	R	569		RS1/10S473J
R	336		RS1/10S562J	R	570		RS1/10S473J
R	337		RS1/10S105J	R	571		RS1/10S0R0J
R	338		RS1/10S222J	R	572		RS1/10S0R0J
R	339		RS1/10S102J	R	573		RS1/10S0R0J
R	340		RS1/10S102J	R	574		RS1/10S0R0J
R	341		RS1/10S0R0J	R	601		RS1/10S152J
R	351		RS1/10S333J	R	602		RS1/10S152J
R	352		RA4C102J	R	603		RS1/10S822J
R	356		RS1/10S102J	R	604		RS1/10S471J
R	357		RS1/10S102J	R	606		RS1/10S0R0J
R	358		RS1/10S102J	R	608		RS1/10S473J
R	359		RS1/10S222J	R	609		RS1/10S102J
R	360		RS1/10S222J	R	610		RS1/10S473J
R	361		RS1/10S562J	R	611		RS1/10S473J
R	362		RS1/10S473J	R	612		RS1/10S0R0J
R	363		RS1/10S473J	R	613		RS1/10S102J
R	364		RS1/10S684J	R	614		RS1/10S102J
R	365		RS1/10S681J	R	615		RS1/10S102J
R	366		RS1/10S562J	R	617		RS1/10S102J
R	368		RS1/10S103J	R	618		RS1/10S222J

Circuit Symbol & No.	Part Name	Part No.
R 619		RS1/10S473J
R 620		RS1/10S473J
R 621		RS1/10S473J
R 622		RS1/10S473J
R 623		RS1/10S221J
R 624		RS1/10S102J
R 625		RA4C221J
R 626		RS1/10S473J
R 627		RS1/10S473J
R 629		RS1/10S0R0J
R 701		RS1/10S224J
R 702		RS1/10S224J
R 703		RS1/10S222J
R 704		RS1/10S222J
R 705		RS1/10S223J
R 706		RS1/10S223J
R 707		RS1/10S224J
R 751		RS1/10S102J
R 752		RS1/10S102J
R 753		RS1/10S473J
R 754		RS1/10S473J
R 755		RS1/10S101J
R 756		RS1/10S101J
R 757		RS1/10S620J
R 758		RS1/10S223J
R 759		RS1/10S102J
R 760		RS1/10S102J
R 761		RS1/10S222J
R 762		RS1/10S472J
R 801		RS1/10S223J
R 802		RS1/10S332J
R 803		RS1/10S0R0J
R 804		RS1/10S222J
R 805		RS1/10S222J
R 806		RS1/10S222J
R 807		RS1/10S222J
R 808		RS1/10S222J
R 809		RS1/10S222J
R 810		RS1/10S222J
R 811		RS1/4S182J
R 813		RS1/10S473J
R 814		RS1/4S512J
R 816		RS1/10S1R0J
R 819		RS2PMF330J
R 820		RS2PMF180J
R 951		RS1/10S473J
R 952		RS1/10S472J
R 953		RD1/4PU102J
R 954		RS1/10S103J
R 955		RS1/10S362J
R 956		RS1/10S103J
R 957		RS1/10S362J
R 958		RS1/10S101J
R 959		RS1/10S104J
R 960		RS1/8S222J
R 961		RS1/10S104J
R 962		RS1/10S103J
R 963		RS1/10S103J
R 964		RS1/10S0R0J
R 966		RS1/10S0R0J

CAPACITORS

Circuit Symbol & No.	Part Name	Part No.
C 203		CEJA101M10
C 204		CKSQYB473K25
C 205		CKSQYB103K50
C 251		CKSQYB104K50
C 252		CKSQYB103K50
C 301		CKSQYB223K50
C 302		CKSQYB223K50
C 303		CKSYB105K16
C 304		CKSYB105K16
C 307		CKSQYB223K50
C 308		CKSQYB103K50
C 309		CKSQYB273K50
C 310		CKSQYB103K50
C 311		CKLSR473K16
C 312		CKSQYB223K50
C 314		CKSQYB223K50
C 319		CKSQYB103K50
C 320		CEJA220M10
C 321		CKSQYB103K50
C 322		CKSQYB471K50
C 323		CKSQYB103K50
C 325		CKSQYB103K50
C 326		CKSQYB103K50
C 327		CCSQCH101J50
C 328		CCSQCH101J50
C 329		CEJA220M6R3
C 330		CKSQYB473K25
C 332		CKSQYB103K50
C 335		CEJA220M10
C 336		CKSQYB103K50
C 337	4.7µF/16V	CCH1250
C 339		CKSQYB103K50
C 340		CKSQYB103K50
C 341	4.7µF/16V	CCH1250
C 342		CCSQCH150J50
C 343		CCSQCH150J50
C 345		CEJAR47M50
C 346		CKSQYB103K50
C 347		CEJA100M16
C 351		CEJA100M16
C 352		CCSQCH101J50
C 353		CKSQYB222K50
C 354		CKSQYB104K50
C 355		CKSYB105K16
C 356		CKSQYB104K50
C 357		CKSQYB472K50
C 358		CEJA4R7M35
C 359		CKSQYB104K50
C 360		CCSQCH220J50
C 361		CCSQCH220J50
C 362		CKSQYB103K50
C 363		CKSQYB104K50
C 364		CKSQYB223K50
C 403		CKSQYB105K10
C 404		CKSQYB105K10
C 405		CKSQYB105K10
C 406		CKSQYB105K10
C 407		CKSQYB105K10
C 408		CKSQYB105K10
C 409		CKSQYB224K16
C 410		CKSQYB224K16
C 411		CKSQYB105K10
C 412		CKSQYB105K10
C 413		CKSQYB153K50
C 414		CKSQYB153K50
C 415		CKSQYB104K50
C 416		CEJA470M10
C 417		CEJA100M16
C 451		CEJA4R7M35
C 452		CEJA4R7M35

=====Circuit Symbol & No.		===Part Name	Part No.
C	453		CEJA4R7M35
C	454		CEJA4R7M35
C	455		CCSQCH101J50
C	456		CCSQCH101J50
C	457		CCSQCH101J50
C	458		CCSQCH101J50
C	501	4700µF/16V	CCH1187
C	502		CKSQYB104K50
C	503		CKSYB224K16
C	504		CKSYB224K16
C	505		CKSYB224K16
C	506		CKSYB224K16
C	507		CEJA330M10
C	509		CKSQYB105K10
C	510		CEJA100M16
C	551		CKSYB105K16
C	602		CEJA2R2M50
C	603		CCSQCH200J50
C	604		CCSQCH200J50
C	605		CKSQYB104K50
C	606		CCSQCH101J50
C	607		CCSQCH101J50
C	612		CCSQCH101J50
C	701		CKSQYB223K50
C	751		CKSQYB102K50
C	752		CKSQYB102K50
C	753		CKSQYB104K50
C	803		CCSQCH101J50
C	804		CKSQYB104K50
C	805		CCSQCH101J50
C	951		CEJA101M10
C	952		CKSQYB103K50
C	953		CKSQYB473K25
C	954		CEJA101M10
C	955	1500µF/16V	CCH1201
C	956		CEJA100M16
C	957		CKSQYB103K50
C	958		CEJA470M10

A Unit Number : CWM6066(MEH-P5000/UC)
Unit Name : Tuner Amp Unit

MISCELLANEOUS

IC	301	IC	PM2006A
IC	401	IC	PML003AM
IC	501	IC	PAL005A
IC	551	IC	TPD1018F
IC	601	IC	PD4959A
IC	602	IC	S-80734ANDYI
IC	751	IC	CA0008AM
Q	201	Transistor	2SD2396
Q	202	Transistor	DTA114EK
Q	203	Transistor	DTC124EK
Q	251	Transistor	2SA1037K
Q	252	Transistor	DTC124EK
Q	253	Transistor	2SC2412K
Q	301	Transistor	2SC2412K
Q	451	Transistor	IMH3A
Q	452	Transistor	IMH3A
Q	453	Transistor	DTA124EK
Q	455	Transistor	DTC124EK
Q	456	Transistor	2SC2412K
Q	457	Transistor	DTC124EK
Q	551	Transistor	2SC2412K
Q	552	Transistor	2SC2412K
Q	553	Transistor	2SC2412K
Q	554	Transistor	2SA1037K
Q	601	Transistor	DTC124EK

=====Circuit Symbol & No.		===Part Name	Part No.
Q	602	Transistor	DTA114EK
Q	751	Transistor	2SA1037K
Q	752	Transistor	DTC114EK
Q	801	Transistor	2SA1037K
Q	802	Transistor	2SB1243
Q	803	Transistor	DTC143EK
Q	804	Transistor	2SA1037K
Q	805	Transistor	DTC114EK
Q	807	Transistor	DTC124EK
Q	951	Transistor	2SA1037K
Q	952	Transistor	DTC114EK
Q	953	Transistor	2SD2396
Q	954	Transistor	2SA1048
Q	955	Transistor	2SA1048
Q	956	Transistor	IMH1A
Q	957	Transistor	2SA1037K
Q	958	Transistor	DTC124EK
Q	959	Transistor	2SD1760F5
D	201	Diode	HZS7L(A3)
D	251	Diode	MA3150(M)
D	252	LED	BR4361F
D	302	Chip Diode	MA151WK
D	451	Chip Diode	MA151WK
D	452	Diode	HZS9L(A2)
D	501	Diode	ERA15-02
D	502	Diode	ERA15-02
D	551	Diode	HZS7L(C2)
D	552	Diode	MA3062(M)
D	553	Diode	ERA15-02
D	554	Chip Diode	MA151WK
D	555	Diode	ERA15-02
D	556	Diode	ERA15-02
D	557	Diode	ERA15-02
D	558	Diode	ERA15-02
D	601	Diode	1SS270
D	801	Diode	MA153
D	802	Diode	MA153
D	803	Diode	MA153
D	804	Diode	MA3062(M)
D	951	Diode	HZS9L(B3)
D	952	Diode	ERA15-02
D	953	Diode	HZS6L(B2)
D	954	Diode	1SS270
L	201	Ferri-Inductor	LAU2R2K
L	301	Ferri-Inductor	LAU2R2K
L	303	Ferri-Inductor	LAU2R2K
L	304	Ferri-Inductor	LAU2R2K
L	307	Inductor	LCTBR47K2125
L	501	Choke Coil 600mH	CTH1226
L	551	Ferri-Inductor	LAU2R2K
L	601	Ferri-Inductor	LAU2R2K
L	602	Ferri-Inductor	LAU2R2K
L	603	Ferri-Inductor	LAU2R2K
L	604	Ferri-Inductor	LAU2R2K
L	605	Inductor	LCTB2R2K2125
L	751	Ferri-Inductor	LAU2R2K
L	801	Ferri-Inductor	LAU2R2K
CF	601	Filter	CTF1071
X	301	Crystal Resonator 7.200MHz	CSS1379
X	601	Radiator 12.58291MHz	CSS1402
S	601	Switch(RESET)	CSG1046
		FM/AM Tuner Unit	CWE1417
BZ	601	Buzzer	CPV1011

=====Circuit Symbol & No.===	Part Name	Part No.
RESISTORS		
R 201		RS1/10S221J
R 202		RS1/10S221J
R 204		RS1/10S221J
R 206		RD1/4PU221J
R 207		RD1/4PU162J
R 251		RS1/10S103J
R 252		RS1/10S102J
R 253		RS1/10S223J
R 254		RS1/10S223J
R 255		RS1/10S103J
R 256		RS1/10S751J
R 257		RS1/10S473J
R 258		RS1/10S272J
R 259		RS1/10S223J
R 260		RS1/8S102J
R 261		RS1/10S221J
R 262		RS1/10S221J
R 301		RS1/10S162J
R 302		RS1/10S162J
R 303		RS1/10S0R0J
R 304		RS1/10S0R0J
R 305		RS1/10S0R0J
R 306		RS1/10S102J
R 308		RS1/10S102J
R 309		RS1/10S222J
R 312		RS1/10S472J
R 313		RS1/10S152J
R 314		RS1/10S472J
R 315		RS1/10S472J
R 317		RS1/10S182J
R 318		RS1/10S103J
R 319		RS1/10S0R0J
R 320		RS1/10S152J
R 321		RS1/10S392J
R 322		RS1/10S392J
R 323		RS1/10S102J
R 324		RS1/10S103J
R 325		RS1/10S393J
R 326		RS1/10S222J
R 328		RA4C681J
R 329		RS1/10S473J
R 330		RS1/10S472J
R 331		RS1/10S562J
R 332		RS1/10S0R0J
R 333		RS1/10S102J
R 334		RS1/10S222J
R 335		RS1/10S473J
R 338		RS1/10S222J
R 339		RS1/10S102J
R 343		RS1/10S0R0J
R 344		RS1/10S0R0J
R 401		RD1/4PU751J
R 402		RD1/4PU751J
R 405		RD1/4PU181J
R 406		RD1/4PU181J
R 407		RD1/4PU223J
R 408		RD1/4PU223J
R 409		RD1/4PU102J
R 410		RD1/4PU102J
R 411		RS1/10S102J
R 412		RS1/10S102J
R 413		RS1/10S102J
R 451		RD1/4PU821J
R 452		RD1/4PU821J
R 453		RD1/4PU821J
R 454		RD1/4PU821J
R 455		RS1/10S223J
R 456		RS1/10S223J
R 457		RS1/10S223J
R 458		RS1/10S223J
R 460		RD1/4PU182J
R 461		RS1/10S103J
R 462		RS1/10S223J
R 463		RS1/10S103J
R 464		RS1/10S103J
R 501		RS1/10S221J
R 502		RS1/10S101J
R 503		RS1/10S153J
R 504		RS1/10S103J
R 551		RS1/10S223J
R 552		RS1/10S473J
R 553		RS1/10S223J
R 554		RS1/10S473J
R 555		RS1/10S472J
R 556		RS1/10S103J
R 557		RS1/10S103J
R 558		RS1/10S473J
R 559		RD1/4PU153J
R 560		RS1/10S472J
R 561		RS1/10S472J
R 562		RS1/10S102J
R 563		RS1/10S473J
R 564		RS1/10S473J
R 566		RS1/10S103J
R 567		RD1/4PU102J
R 568		RD1/4PU102J
R 569		RS1/10S473J
R 570		RS1/10S473J
R 571		RS1/10S0R0J
R 572		RS1/10S0R0J
R 573		RS1/10S0R0J
R 574		RS1/10S0R0J
R 601		RS1/10S152J
R 602		RS1/10S152J
R 603		RS1/10S822J
R 604		RS1/10S471J
R 606		RS1/10S0R0J
R 608		RS1/10S473J
R 609		RS1/10S102J
R 610		RS1/10S473J
R 611		RS1/10S473J
R 612		RS1/10S0R0J
R 613		RS1/10S102J
R 614		RS1/10S102J
R 615		RS1/10S102J
R 616		RS1/10S102J
R 617		RS1/10S102J
R 618		RS1/10S222J
R 619		RS1/10S473J
R 620		RS1/10S473J
R 621		RS1/10S473J
R 622		RS1/10S473J
R 623		RS1/10S221J
R 624		RS1/10S102J
R 625		RA4C221J
R 626		RS1/10S473J
R 627		RS1/10S473J
R 628		RS1/10S473J
R 630		RS1/16S473J
R 631		RS1/16S473J

=====Circuit Symbol & No.===Part Name			Part No.
R	632		RS1/16S473J
R	751		RS1/10S102J
R	752		RS1/10S102J
R	753		RS1/10S473J
R	754		RS1/10S473J
R	755		RS1/10S101J
R	756		RS1/10S101J
R	757		RS1/10S620J
R	758		RS1/10S223J
R	759		RS1/10S102J
R	760		RS1/10S102J
R	761		RS1/10S222J
R	762		RS1/10S472J
R	801		RS1/10S223J
R	802		RS1/10S332J
R	804		RS1/10S222J
R	805		RS1/10S222J
R	806		RS1/10S222J
R	807		RS1/10S222J
R	808		RS1/10S222J
R	809		RS1/10S222J
R	810		RS1/10S222J
R	811		RS1/4S182J
R	813		RS1/10S473J
R	814		RS1/4S512J
R	816		RS1/10S1R0J
R	819		RS2PMF330J
R	820		RS2PMF180J
R	951		RS1/10S473J
R	952		RS1/10S472J
R	953		RD1/4PU102J
R	954		RS1/10S103J
R	955		RS1/10S362J
R	956		RS1/10S103J
R	957		RS1/10S362J
R	958		RS1/10S101J
R	959		RS1/10S104J
R	960		RS1/8S222J
R	961		RS1/10S104J
R	962		RS1/10S103J
R	963		RS1/10S103J
R	964		RS1/10S0R0J
R	966		RS1/10S0R0J

CAPACITORS

=====Circuit Symbol & No.===Part Name			Part No.
C	203		CEJA101M10
C	204		CKSQYB473K25
C	205		CKSQYB103K50
C	251		CKSQYB104K50
C	252		CKSQYB103K50
C	301		CKSQYB473K25
C	302		CKSQYB473K25
C	307		CKSQYB223K50
C	308		CKSQYB103K50
C	309		CKSQYB273K50
C	310		CKSQYB103K50
C	311		CKLSR473K16
C	312		CKSQYB223K50
C	314		CKSQYB223K50
C	319		CKSQYB103K50
C	320		CEJA220M10
C	321		CKSQYB103K50
C	323		CKSQYB103K50
C	325		CKSQYB103K50
C	326		CKSQYB103K50
C	327		CCSQCH101J50
C	328		CCSQCH101J50
C	329		CEJA220M6R3
C	330		CKSQYB473K25
C	332		CKSQYB103K50
C	333		CEJA220M6R3
C	334		CKSQYB103K50
C	338		CKSQYB154K16
C	339		CKSQYB103K50
C	341	4.7µF/16V	CCH1250
C	342		CCSQCH150J50
C	343		CCSQCH150J50
C	346		CKSQYB103K50
C	347		CEJA100M16
C	403		CKSQYB105K10
C	404		CKSQYB105K10
C	405		CKSQYB105K10
C	406		CKSQYB105K10
C	407		CKSQYB105K10
C	408		CKSQYB105K10
C	409		CKSQYB224K16
C	410		CKSQYB224K16
C	411		CKSQYB105K10
C	412		CKSQYB105K10
C	413		CKSQYB153K50
C	414		CKSQYB153K50
C	415		CKSQYB104K50
C	416		CEJA470M10
C	417		CEJA100M16
C	451		CEJA4R7M35
C	452		CEJA4R7M35
C	453		CEJA4R7M35
C	454		CEJA4R7M35
C	455		CCSQCH101J50
C	456		CCSQCH101J50
C	457		CCSQCH101J50
C	458		CCSQCH101J50
C	501	4700µF/16V	CCH1187
C	502		CKSQYB104K50
C	503		CKSYB224K16
C	504		CKSYB224K16
C	505		CKSYB224K16
C	506		CKSYB224K16
C	507		CEJA330M10
C	509		CKSQYB105K10
C	510		CEJA100M16
C	551		CKSYB105K16
C	555		CKSQYB473K25
C	557		CKSQYB473K25
C	602		CEJA2R2M50
C	603		CCSQCH200J50
C	604		CCSQCH200J50
C	605		CKSQYB104K50
C	606		CCSQCH101J50
C	607		CCSQCH101J50
C	612		CCSQCH101J50
C	751		CKSQYB102K50
C	752		CKSQYB102K50
C	753		CKSQYB104K50
C	803		CCSQCH101J50
C	804		CKSQYB104K50
C	805		CCSQCH101J50
C	951		CEJA101M10
C	952		CKSQYB103K50
C	953		CKSQYB473K25
C	954		CEJA101M10
C	955	1500µF/16V	CCH1201
C	956		CEJA100M16
C	957		CKSQYB103K50
C	958		CEJA470M10

A Unit Number : CWM6038(MEH-P5050/ES)
Unit Name : Tuner Amp Unit

MISCELLANEOUS

=====Circuit Symbol & No.		===Part Name	Part No.
IC	301	IC	PM2006A
IC	401	IC	PML003AM
IC	501	IC	PAL005A
IC	551	IC	TPD1018F
IC	601	IC	PD4959A
IC	602	IC	S-80734ANDYI
IC	751	IC	CA0008AM
Q	201	Transistor	2SD2396
Q	202	Transistor	DTA114EK
Q	203	Transistor	DTC124EK
Q	251	Transistor	2SA1037K
Q	252	Transistor	DTC124EK
Q	253	Transistor	2SC2412K
Q	301	Transistor	2SC2412K
Q	451	Transistor	IMH3A
Q	452	Transistor	IMH3A
Q	453	Transistor	DTA124EK
Q	455	Transistor	DTC124EK
Q	456	Transistor	2SC2412K
Q	457	Transistor	DTC124EK
Q	551	Transistor	2SC2412K
Q	552	Transistor	2SC2412K
Q	553	Transistor	2SC2412K
Q	554	Transistor	2SA1037K
Q	601	Transistor	DTC124EK
Q	602	Transistor	DTA114EK
Q	751	Transistor	2SA1037K
Q	752	Transistor	DTC114EK
Q	801	Transistor	2SA1037K
Q	802	Transistor	2SB1243
Q	803	Transistor	DTC143EK
Q	804	Transistor	2SA1037K
Q	805	Transistor	DTC114EK
Q	807	Transistor	DTC124EK
Q	951	Transistor	2SA1037K
Q	952	Transistor	DTC114EK
Q	953	Transistor	2SD2396
Q	954	Transistor	2SA1048
Q	955	Transistor	2SA1048
Q	956	Transistor	IMH1A
Q	957	Transistor	2SA1037K
Q	958	Transistor	DTC124EK
Q	959	Transistor	2SD1760F5
D	201	Diode	HZS7L(A3)
D	251	Diode	MA3150(M)
D	252	LED	BR4361F
D	302	Chip Diode	MA151WK
D	451	Chip Diode	MA151WK
D	452	Diode	HZS9L(A2)
D	501	Diode	ERA15-02
D	502	Diode	ERA15-02
D	551	Diode	HZS7L(C2)
D	552	Diode	MA3062(M)
D	553	Diode	ERA15-02
D	554	Chip Diode	MA151WK
D	555	Diode	ERA15-02
D	556	Diode	ERA15-02
D	557	Diode	ERA15-02
D	558	Diode	ERA15-02
D	601	Diode	1SS270
D	801	Diode	MA153
D	802	Diode	MA153
D	803	Diode	MA153
D	804	Diode	MA3062(M)
D	951	Diode	HZS9L(B3)

=====Circuit Symbol & No.		===Part Name	Part No.
D	952	Diode	ERA15-02
D	953	Diode	HZS6L(B2)
D	954	Diode	1SS270
L	201	Ferri-Inductor	LAU2R2K
L	301	Ferri-Inductor	LAU2R2K
L	303	Ferri-Inductor	LAU2R2K
L	304	Ferri-Inductor	LAU2R2K
L	501	Choke Coil 600mH	CTH1226
L	551	Ferri-Inductor	LAU2R2K
L	601	Ferri-Inductor	LAU2R2K
L	602	Ferri-Inductor	LAU2R2K
L	603	Ferri-Inductor	LAU2R2K
L	604	Ferri-Inductor	LAU2R2K
L	605	Inductor	LCTB2R2K2125
L	751	Ferri-Inductor	LAU2R2K
L	801	Ferri-Inductor	LAU2R2K
CF	601	Filter	CTF1071
X	301	Crystal Resonator 7.200MHz	CSS1379
X	601	Radiator 12.58291MHz	CSS1402
S	601	Switch(RESET)	CSG1046
		FM/AM Tuner Unit	CWE1485
BZ	601	Buzzer	CPV1011

RESISTORS

R	201	RS1/10S221J
R	202	RS1/10S221J
R	204	RS1/10S221J
R	206	RD1/4PU221J
R	207	RD1/4PU162J
R	251	RS1/10S103J
R	252	RS1/10S102J
R	253	RS1/10S223J
R	254	RS1/10S223J
R	255	RS1/10S103J
R	256	RS1/10S751J
R	257	RS1/10S473J
R	258	RS1/10S272J
R	259	RS1/10S223J
R	260	RS1/8S102J
R	261	RS1/10S221J
R	262	RS1/10S221J
R	301	RS1/10S162J
R	302	RS1/10S162J
R	303	RS1/10S0R0J
R	304	RS1/10S0R0J
R	305	RS1/10S152J
R	306	RS1/10S102J
R	307	RS1/10S680J
R	308	RS1/10S102J
R	309	RS1/10S222J
R	312	RS1/10S472J
R	313	RS1/10S152J
R	314	RS1/10S472J
R	315	RS1/10S472J
R	317	RS1/10S182J
R	318	RS1/10S103J
R	319	RS1/10S0R0J
R	320	RS1/10S152J
R	321	RS1/10S392J
R	322	RS1/10S392J
R	323	RS1/10S102J
R	324	RS1/10S103J
R	325	RS1/10S393J
R	326	RS1/10S222J
R	328	RA4C681J
R	329	RS1/10S473J
R	330	RS1/10S472J
R	331	RS1/10S562J
R	333	RS1/10S102J

=====Circuit Symbol & No.===Part Name			Part No.
R	334		RS1/10S222J
R	335		RS1/10S473J
R	338		RS1/10S222J
R	339		RS1/10S102J
R	341		RS1/10S0R0J
R	401		RD1/4PU751J
R	402		RD1/4PU751J
R	405		RD1/4PU181J
R	406		RD1/4PU181J
R	407		RD1/4PU223J
R	408		RD1/4PU223J
R	409		RD1/4PU102J
R	410		RD1/4PU102J
R	411		RS1/10S102J
R	412		RS1/10S102J
R	413		RS1/10S102J
R	451		RD1/4PU821J
R	452		RD1/4PU821J
R	453		RD1/4PU821J
R	454		RD1/4PU821J
R	455		RS1/10S223J
R	456		RS1/10S223J
R	457		RS1/10S223J
R	458		RS1/10S223J
R	460		RD1/4PU182J
R	461		RS1/10S103J
R	462		RS1/10S223J
R	463		RS1/10S103J
R	464		RS1/10S103J
R	501		RS1/10S221J
R	502		RS1/10S101J
R	503		RS1/10S153J
R	504		RS1/10S103J
R	551		RS1/10S223J
R	552		RS1/10S473J
R	553		RS1/10S223J
R	554		RS1/10S473J
R	555		RS1/10S472J
R	556		RS1/10S103J
R	557		RS1/10S103J
R	558		RS1/10S473J
R	559		RD1/4PU153J
R	560		RS1/10S472J
R	561		RS1/10S472J
R	562		RS1/10S102J
R	563		RS1/10S473J
R	564		RS1/10S473J
R	566		RS1/10S103J
R	567		RD1/4PU102J
R	568		RD1/4PU102J
R	569		RS1/10S473J
R	570		RS1/10S473J
R	571		RS1/10S0R0J
R	572		RS1/10S0R0J
R	573		RS1/10S0R0J
R	574		RS1/10S0R0J
R	601		RS1/10S152J
R	602		RS1/10S152J
R	603		RS1/10S822J
R	604		RS1/10S471J
R	606		RS1/10S0R0J
R	608		RS1/10S473J
R	609		RS1/10S102J
R	610		RS1/10S473J
R	611		RS1/10S473J

=====Circuit Symbol & No.===Part Name			Part No.
R	612		RS1/10S0R0J
R	613		RS1/10S102J
R	614		RS1/10S102J
R	615		RS1/10S102J
R	616		RS1/10S102J
R	617		RS1/10S102J
R	618		RS1/10S222J
R	619		RS1/10S473J
R	620		RS1/10S473J
R	621		RS1/10S473J
R	622		RS1/10S473J
R	623		RS1/10S221J
R	624		RS1/10S102J
R	625		RA4C221J
R	626		RS1/10S473J
R	628		RS1/10S473J
R	630		RS1/16S473J
R	631		RS1/16S473J
R	632		RS1/16S473J
R	751		RS1/10S102J
R	752		RS1/10S102J
R	753		RS1/10S473J
R	754		RS1/10S473J
R	755		RS1/10S101J
R	756		RS1/10S101J
R	757		RS1/10S620J
R	758		RS1/10S223J
R	759		RS1/10S102J
R	760		RS1/10S102J
R	761		RS1/10S222J
R	762		RS1/10S472J
R	801		RS1/10S223J
R	802		RS1/10S332J
R	804		RS1/10S222J
R	805		RS1/10S222J
R	806		RS1/10S222J
R	807		RS1/10S222J
R	808		RS1/10S222J
R	809		RS1/10S222J
R	810		RS1/10S222J
R	811		RS1/4S182J
R	813		RS1/10S473J
R	814		RS1/4S512J
R	816		RS1/10S1R0J
R	819		RS2PMF330J
R	820		RS2PMF180J
R	951		RS1/10S473J
R	952		RS1/10S472J
R	953		RD1/4PU102J
R	954		RS1/10S103J
R	955		RS1/10S362J
R	956		RS1/10S103J
R	957		RS1/10S362J
R	958		RS1/10S101J
R	959		RS1/10S104J
R	960		RS1/8S222J
R	961		RS1/10S104J
R	962		RS1/10S103J
R	963		RS1/10S103J
R	964		RS1/10S0R0J
R	966		RS1/10S0R0J

=====Circuit Symbol & No.		===Part Name	Part No.
CAPACITORS			
C	203		CEJA101M10
C	204		CKSQYB473K25
C	205		CKSQYB103K50
C	251		CKSQYB104K50
C	252		CKSQYB103K50
C	301		CKSQYB473K25
C	302		CKSQYB473K25
C	307		CKSQYB223K50
C	308		CKSQYB103K50
C	309		CKSQYB273K50
C	310		CKSQYB103K50
C	311		CKLSR473K16
C	312		CKSQYB223K50
C	314		CKSQYB223K50
C	319		CKSQYB103K50
C	320		CEJA220M10
C	321		CKSQYB103K50
C	323		CKSQYB103K50
C	324		CKSQYB103K50
C	325		CKSQYB103K50
C	326		CKSQYB103K50
C	327		CCSQCH101J50
C	328		CCSQCH101J50
C	329		CEJA220M6R3
C	330		CKSQYB473K25
C	332		CKSQYB103K50
C	333		CEJA220M6R3
C	334		CKSQYB103K50
C	338		CKSQYB154K16
C	339		CKSQYB103K50
C	341	4.7µF/16V	CCH1250
C	342		CCSQCH150J50
C	343		CCSQCH150J50
C	346		CKSQYB103K50
C	347		CEJA100M16
C	403		CKSQYB105K10
C	404		CKSQYB105K10
C	405		CKSQYB105K10
C	406		CKSQYB105K10
C	407		CKSQYB105K10
C	408		CKSQYB105K10
C	409		CKSQYB224K16
C	410		CKSQYB224K16
C	411		CKSQYB105K10
C	412		CKSQYB105K10
C	413		CKSQYB153K50
C	414		CKSQYB153K50
C	415		CKSQYB104K50
C	416		CEJA470M10
C	417		CEJA100M16
C	451		CEJA4R7M35
C	452		CEJA4R7M35
C	453		CEJA4R7M35
C	454		CEJA4R7M35
C	455		CCSQCH101J50
C	456		CCSQCH101J50
C	457		CCSQCH101J50
C	458		CCSQCH101J50
C	501		CCH1187
C	502	4700µF/16V	CKSQYB104K50
C	503		CKSYB224K16
C	504		CKSYB224K16
C	505		CKSYB224K16
C	506		CKSYB224K16
C	507		CEJA330M10

=====Circuit Symbol & No.		===Part Name	Part No.
C	509		CKSQYB105K10
C	510		CEJA100M16
C	551		CKSYB105K16
C	555		CKSQYB473K25
C	557		CKSQYB473K25
C	602		CEJA2R2M50
C	603		CCSQCH200J50
C	604		CCSQCH200J50
C	605		CKSQYB104K50
C	606		CCSQCH101J50
C	607		CCSQCH101J50
C	612		CCSQCH101J50
C	751		CKSQYB102K50
C	752		CKSQYB102K50
C	753		CKSQYB104K50
C	803		CCSQCH101J50
C	804		CKSQYB104K50
C	805		CCSQCH101J50
C	951		CEJA101M10
C	952		CKSQYB103K50
C	953		CKSQYB473K25
C	954		CEJA101M10
C	955	1500µF/16V	CCH1201
C	956		CEJA100M16
C	957		CKSQYB103K50
C	958		CEJA470M10

B Unit Number : CWE1416(MEH-P5000RII/EW)
Unit Name : FM/AM Tuner Unit

MISCELLANEOUS

IC	1	IC	PA4023B
IC	2	IC	PA4024A
Q	1	Transistor	2SC2412K
Q	2	Transistor	DTC124EU
Q	3	FET	3SK263
Q	31	Transistor	2SC2412K
Q	154	Transistor	DTC124EU
Q	165	Transistor	2SC2412K
Q	201	FET	2SK932
Q	202	Transistor	2SC2412K
Q	203	Transistor	DTC124EU
D	4	Diode	1SV250
D	5	Diode	KV1410-F1
D	7	Diode	KV1410-F1
D	8	Diode	KV1410-F1
D	201	Diode	MA157
D	202	Diode	MA157
D	231	Diode	SVC253
L	2	Coil	CTC1108
L	3	Inductor	LCTB2R2K2125
L	4	Coil	CTC1108
L	5	Coil	CTC1107
L	6	Inductor	LCTBR15K1608
L	51	Ferri-Inductor	LAU150K
L	201	Ferri-Inductor	LAU4R7K
L	202	Ferri-Inductor	LAU330K
L	203	Inductor	CTF1287
L	208	Inductor	LAU121K
L	231	Inductor	LCTA3R3J3225
T	31	Coil	CTE1116
T	51	Coil	CTC1136
TC	1	Trimmer	CCL1046
CF	51	Ceramic Filter	CTF1442
CF	52	Ceramic Filter	CTF1442
CF	53	Ceramic Filter	CTF1442

=====Circuit Symbol & No.===		Part Name	Part No.
CF	232	Ceramic Filter	CTF1348
X	151	Radiator 918.5Hz	CSS1365
X	231	Crystal Resonator 10.26MHz	CSS1111
VR	154	Semi-fixed 150kΩ(B)	CCP1213
AR	1		DSP-201M

RESISTORS

R	1		RS1/16S0R0J
R	4		RS1/16S154J
R	5		RS1/16S391J
R	6		RS1/16S223J
R	7		RS1/16S123J
R	8		RS1/16S332J
R	9		RS1/16S473J
R	10		RS1/16S223J
R	11		RS1/16S124J
R	13		RS1/16S563J
R	15		RS1/16S271J
R	16		RS1/16S104J
R	17		RS1/16S332J
R	18		RS1/16S332J
R	31		RS1/16S470J
R	32		RS1/16S822J
R	33		RS1/16S822J
R	34		RS1/16S331J
R	35		RS1/16S331J
R	51		RS1/16S271J
R	52		RS1/16S560J
R	55		RS1/16S102J
R	56		RS1/16S823J
R	61		RS1/16S392J
R	62		RS1/16S393J
R	101		RS1/16S272J
R	102		RS1/16S682J
R	103		RS1/16S333J
R	104		RS1/16S334J
R	105		RS1/16S683J
R	107		RS1/16S222J
R	151		RS1/16S222J
R	152		RS1/16S393J
R	154		RS1/16S104J
R	155		RS1/16S273J
R	156		RS1/16S243J
R	157		RS1/16S203J
R	160		RS1/16S222J
R	161		RS1/16S563J
R	162		RS1/16S105J
R	163		RS1/16S222J
R	202		RS1/16S223J
R	203		RS1/16S225J
R	204		RS1/16S103J
R	206		RS1/16S220J
R	207		RS1/16S101J
R	208		RS1/16S102J
R	209		RS1/16S471J
R	214		RS1/16S822J
R	215		RS1/16S822J
R	217		RS1/16S102J
R	231		RS1/16S272J
R	232		RS1/16S473J
R	237		RS1/16S103J
R	238		RS1/16S104J
R	239		RS1/16S104J
R	240		RS1/16S332J
R	241		RS1/16S202J
R	243		RS1/16S123J
R	244		RS1/16S103J
R	247		RS1/16S123J

=====Circuit Symbol & No.===		Part Name	Part No.

CAPACITORS

C	1		CCSQCH6R0D50
C	2		CCSRCK2R0C50
C	4		CCSRCH820J50
C	6		CCSRCH820J50
C	8		CKSRYB103K25
C	9		CKSQYB104K16
C	10		CCSRCKR50C50
C	11		CEJA1R0M50
C	13		CKSRYB222K50
C	14		CCSRCH220J50
C	16		CCSRCH8R0D50
C	17		CKSRYB222K50
C	18		CKSRYB103K25
C	19		CKSRYB222K50
C	20		CKSRYB222K50
C	21		CEJA100M16
C	22		CCSRTH9R0D50
C	23		CCSRTH120J50
C	24		CCSRCH471J50
C	25		CKSRYB103K25
C	31		CKSRYB103K25
C	32		CKSQYB472K50
C	33		CCSRCH5R0C50
C	34		CKSQYB104K16
C	36		CCSRRH201J50
C	51		CKSRYB223K25
C	52		CKSRYB103K25
C	54		CCSRCH470J50
C	55		CKSQYB223K25
C	56		CKSQYB104K16
C	57		CKSRYB472K50
C	58		CEJA330M10
C	59		CKSRYB103K25
C	61		CCSRCH270J50
C	62		CKSRYB103K25
C	63		CEJAR15M50
C	101		CEJANP100M10
C	102		CKSRYB182K50
C	103		CKSRYB682K25
C	104		CEJA2R2M50
C	105		CKSRYB103K25
C	106		CCSRCH151J50
C	107		CKSRYB103K25
C	151		CKSRYB472K50
C	152		CKSQYB104K16
C	153		CEJA3R3M50
C	154		CKSQYB104K16
C	157		CEJA3R3M50
C	158		CKSYB474K16
C	159		CEJA220M6R3
C	160		CKSQYB104K16
C	161		CKSQYB104K16
C	162		CEJA3R3M50
C	163		CKSRYB102K50
C	170		CCSRCH100D50
C	201		CCSRCH471J50
C	202		CCSRCH100D50
C	203		CKSRYB332K50
C	204		CKSQYB473K16
C	205		CKSQYB473K16
C	206		CKSQYB104K16
C	207		CCSRCH560J50
C	209		CKSQYB104K16
C	211		CCSRCH101J50
C	212		CEJA470M6R3

=====Circuit Symbol & No.	===Part Name	Part No.
C 213		CKSRYB103K25
C 216		CCSRCH101J50
C 217		CEJA1R5M50
C 219		CCSRCH471J50
C 220		CKSRYB103K25
C 230		CKSRYB103K25
C 231		CCSRCH330J50
C 232		CCSRCH150J50
C 233		CKSQYB104K16
C 234		CEJA330M10
C 235		CKSRYB332K50
C 236		CKSQYB473K16
C 237		CCSRCH120J50
C 239		CKSRYB472K50
C 240		CEJAR47M50
C 241		CKSQYB104K16
C 242		CEJAR47M50
C 243		CEJAR33M50
C 244		CKSQYB473K16
C 245		CKSRYB123K25
C 246		CKSQYB473K16
C 250		CCSRCH471J50

B Unit Number : CWE1417(MEH-P5000/UC)
Unit Name : FM/AM Tuner Unit

MISCELLANEOUS

IC	1	IC	PA4023B
IC	2	IC	PA4024A
Q	1	Transistor	2SC2412K
Q	2	Transistor	DTC124EU
Q	3	FET	3SK263
Q	31	Transistor	2SC2412K
Q	201	FET	2SK932
Q	202	Transistor	2SC2412K
Q	203	Transistor	DTC124EU
D	1	Diode	RD39JS
D	2	Diode	RD39JS
D	4	Diode	1SV250
D	5	Diode	KV1410-F1
D	6	Diode	MA157
D	7	Diode	KV1410-F1
D	8	Diode	KV1410-F1
D	201	Diode	MA157
D	202	Diode	MA157
D	231	Diode	SVC253
L	2	Coil	CTC1108
L	3	Inductor	LCTB2R2K2125
L	4	Coil	CTC1108
L	5	Coil	CTC1107
L	51	Ferri-Inductor	LAU150K
L	201	Ferri-Inductor	LAU4R7K
L	202	Ferri-Inductor	LAU330K
L	203	Inductor	CTF1287
L	208	Inductor	LAU121K
L	231	Inductor	LCTA3R3J3225
T	31	Coil	CTE1116
T	51	Coil	CTC1136
CF	51	Ceramic Filter	CTF1441
CF	52	Ceramic Filter	CTF1441
CF	53	Ceramic Filter	CTF1441
CF	232	Ceramic Filter	CTF1348
X	151	Radiator 918.5Hz	CSS1365
X	231	Crystal Resonator 10.26MHz	CSS1111
VR	154	Semi-fixed 150kΩ(B)	CCP1213

=====Circuit Symbol & No.	===Part Name	Part No.

RESISTORS

R	1	RS1/16S225J
R	2	RS1/16S225J
R	4	RS1/16S154J
R	5	RS1/16S391J
R	6	RS1/16S223J
R	7	RS1/16S123J
R	8	RS1/16S332J
R	9	RS1/16S473J
R	10	RS1/16S223J
R	11	RS1/16S124J
R	13	RS1/16S563J
R	15	RS1/16S271J
R	16	RS1/16S104J
R	17	RS1/16S332J
R	18	RS1/16S332J
R	31	RS1/16S470J
R	32	RS1/16S822J
R	33	RS1/16S822J
R	34	RS1/16S331J
R	35	RS1/16S331J
R	51	RS1/16S271J
R	52	RS1/16S560J
R	55	RS1/16S102J
R	56	RS1/16S823J
R	61	RS1/16S392J
R	62	RS1/16S273J
R	101	RS1/16S272J
R	102	RS1/16S682J
R	103	RS1/16S333J
R	104	RS1/16S334J
R	105	RS1/16S683J
R	107	RS1/16S222J
R	151	RS1/16S222J
R	152	RS1/16S393J
R	155	RS1/16S273J
R	156	RS1/16S243J
R	157	RS1/16S203J
R	160	RS1/16S222J
R	161	RS1/16S563J
R	162	RS1/16S105J
R	163	RS1/16S223J
R	202	RS1/16S223J
R	203	RS1/16S225J
R	204	RS1/16S103J
R	206	RS1/16S220J
R	207	RS1/16S101J
R	208	RS1/16S102J
R	209	RS1/16S471J
R	214	RS1/16S822J
R	215	RS1/16S822J
R	217	RS1/16S102J
R	231	RS1/16S272J
R	232	RS1/16S473J
R	237	RS1/16S103J
R	238	RS1/16S104J
R	239	RS1/16S104J
R	240	RS1/16S332J
R	241	RS1/16S202J
R	243	RS1/16S183J
R	244	RS1/16S392J
R	247	RS1/16S123J

=====Circuit Symbol & No.	===Part Name	Part No.
CAPACITORS		
C 1		CCSQCH6R0D50
C 2		CCSRCK2R0C50
C 4		CCSRCH820J50
C 6		CCSRCH820J50
C 8		CKSRYB103K25
C 9		CKSQYB104K16
C 10		CCSRCKR50C50
C 11		CEJA1R0M50
C 12		CKSRYB222K50
C 13		CKSRYB222K50
C 14		CCSRCH220J50
C 15		CCSRCH6R0D50
C 16		CCSRCH8R0D50
C 17		CKSRYB222K50
C 18		CKSRYB103K25
C 19		CKSRYB222K50
C 20		CKSRYB222K50
C 21		CEJA100M16
C 22		CCSRTH9R0D50
C 23		CCSRTH120J50
C 24		CCSRCH471J50
C 25		CKSRYB103K25
C 26		CCSRCH101J50
C 31		CKSRYB103K25
C 32		CKSQYB472K50
C 33		CCSRCH5R0C50
C 34		CKSQYB104K16
C 36		CCSRRH201J50
C 51		CKSRYB223K25
C 52		CKSRYB103K25
C 54		CCSRCH470J50
C 55		CKSQYB223K25
C 56		CKSQYB104K16
C 57		CKSRYB472K50
C 58		CEJA330M10
C 59		CKSRYB103K25
C 60		CKSRYB102K50
C 61		CCSRCH270J50
C 62		CKSRYB103K25
C 63		CEJAR22M50
C 101		CEJANP100M10
C 102		CKSRYB182K50
C 103		CKSRYB682K25
C 104		CEJA2R2M50
C 105		CKSRYB103K25
C 106		CCSRCH151J50
C 107		CKSRYB103K25
C 151		CKSRYB472K50
C 152		CKSQYB104K16
C 153		CEJA3R3M50
C 154		CKSQYB104K16
C 157		CEJA3R3M50
C 158		CKSYB474K16
C 159		CEJA220M6R3
C 160		CKSQYB104K16
C 161		CKSQYB104K16
C 162		CEJA3R3M50
C 163		CKSRYB102K50
C 170		CCSRCH100D50
C 201		CCSRCH471J50
C 202		CCSRCH100D50
C 203		CKSRYB332K50
C 204		CKSQYB473K16
C 205		CKSQYB473K16
C 206		CKSQYB104K16
C 207		CCSRCH560J50
C 209		CKSQYB104K16
C 211		CCSRCH101J50
C 212		CEJA470M6R3
C 213		CKSRYB103K25
C 216		CCSRCH101J50
C 217		CEJA1R5M50
C 219		CCSRCH471J50
C 220		CKSRYB103K25
C 230		CKSRYB103K25
C 231		CCSRCH330J50
C 232		CCSRCH150J50
C 233		CKSQYB104K16
C 234		CEJA330M10
C 235		CKSRYB332K50
C 236		CKSQYB473K16
C 237		CCSRCH120J50
C 239		CKSRYB472K50
C 240		CEJAR47M50
C 241		CKSQYB104K16
C 242		CEJAR47M50
C 243		CEJAR33M50
C 244		CKSQYB473K16
C 245		CKSRYB333K16
C 246		CKSQYB473K16
C 250		CCSRCH471J50

B Unit Number : CWE1485(MEH-P5050/ES)
Unit Name : FM/AM Tuner Unit

MISCELLANEOUS

IC	1	IC	PA4023B
IC	2	IC	PA4024A
Q	1	Transistor	2SC2412K
Q	2	Transistor	DTC124EU
Q	3	FET	3SK263
Q	31	Transistor	2SC2412K
Q	201	FET	2SK932
Q	202	Transistor	2SC2412K
Q	203	Transistor	DTC124EU
D	1	Diode	RD39JS
D	2	Diode	RD39JS
D	4	Diode	1SV250
D	5	Diode	KV1410-F1
D	6	Diode	MA157
D	7	Diode	KV1410-F1
D	8	Diode	KV1410-F1
D	201	Diode	MA157
D	202	Diode	MA157
D	231	Diode	SVC253
L	2	Coil	CTC1108
L	3	Inductor	LCTB2R2K2125
L	4	Coil	CTC1108
L	5	Coil	CTC1107
L	6	Inductor	LCTBR15K1608
L	51	Ferri-Inductor	LAU150K
L	201	Ferri-Inductor	LAU4R7K
L	202	Ferri-Inductor	LAU330K
L	203	Inductor	CTF1287
L	208	Inductor	LAU121K
L	231	Inductor	LCTA3R3J3225
T	31	Coil	CTE1117
T	51	Coil	CTC1136
CF	51	Ceramic Filter	CTF1441
CF	52	Ceramic Filter	CTF1441
CF	53	Ceramic Filter	CTF1441

=====Circuit Symbol & No.		===Part Name	Part No.
CF	232	Ceramic Filter	CTF1348
X	151	Radiator 918.5Hz	CSS1365
X	231	Crystal Resonator 10.26MHz	CSS1111
VR	154	Semi-fixed 150kΩ(B)	CCP1213

RESISTORS

R	1	RS1/16S225J
R	2	RS1/16S225J
R	4	RS1/16S154J
R	5	RS1/16S391J
R	6	RS1/16S223J
R	7	RS1/16S123J
R	8	RS1/16S332J
R	9	RS1/16S473J
R	10	RS1/16S223J
R	11	RS1/16S124J
R	13	RS1/16S563J
R	15	RS1/16S271J
R	16	RS1/16S104J
R	17	RS1/16S332J
R	18	RS1/16S332J
R	31	RS1/16S470J
R	32	RS1/16S822J
R	33	RS1/16S822J
R	34	RS1/16S331J
R	35	RS1/16S331J
R	51	RS1/16S271J
R	52	RS1/16S560J
R	55	RS1/16S102J
R	56	RS1/16S823J
R	61	RS1/16S392J
R	62	RS1/16S273J
R	101	RS1/16S272J
R	102	RS1/16S682J
R	103	RS1/16S333J
R	104	RS1/16S334J
R	105	RS1/16S683J
R	107	RS1/16S222J
R	151	RS1/16S222J
R	152	RS1/16S393J
R	155	RS1/16S273J
R	156	RS1/16S243J
R	157	RS1/16S203J
R	160	RS1/16S222J
R	161	RS1/16S563J
R	162	RS1/16S105J
R	163	RS1/16S223J
R	202	RS1/16S223J
R	203	RS1/16S225J
R	204	RS1/16S103J
R	206	RS1/16S220J
R	207	RS1/16S101J
R	208	RS1/16S102J
R	209	RS1/16S471J
R	214	RS1/16S822J
R	215	RS1/16S822J
R	217	RS1/16S102J
R	231	RS1/16S272J
R	232	RS1/16S473J
R	237	RS1/16S103J
R	238	RS1/16S104J
R	239	RS1/16S104J
R	240	RS1/16S332J
R	241	RS1/16S202J
R	243	RS1/16S183J
R	244	RS1/16S392J
R	247	RS1/16S123J

=====Circuit Symbol & No.		===Part Name	Part No.

CAPACITORS

C	1	CCSQCH6R0D50
C	2	CCSRCK2R0C50
C	4	CCSRCH820J50
C	6	CCSRCH820J50
C	8	CKSRYB103K25
C	9	CKSQYB104K16
C	10	CCSRCKR50C50
C	11	CEJA1R0M50
C	12	CKSRYB222K50
C	13	CKSRYB222K50
C	14	CCSRCH220J50
C	15	CCSRCH6R0D50
C	16	CCSRCH8R0D50
C	17	CKSRYB222K50
C	18	CKSRYB103K25
C	19	CKSRYB222K50
C	20	CKSRYB222K50
C	21	CEJA100M16
C	22	CCSRTH9R0D50
C	23	CCSRTH120J50
C	24	CCSRCH471J50
C	25	CKSRYB103K25
C	31	CKSRYB103K25
C	32	CKSQYB472K50
C	33	CCSRCH5R0C50
C	34	CKSQYB104K16
C	36	CCSRRH201J50
C	51	CKSRYB223K25
C	52	CKSRYB103K25
C	54	CCSRCH470J50
C	55	CKSQYB223K25
C	56	CKSQYB104K16
C	57	CKSRYB472K50
C	58	CEJA330M10
C	59	CKSRYB103K25
C	60	CKSRYB102K50
C	61	CCSRCH270J50
C	62	CKSRYB103K25
C	63	CEJAR22M50
C	101	CEJANP100M10
C	102	CKSRYB182K50
C	103	CKSRYB682K25
C	104	CEJA2R2M50
C	105	CKSRYB103K25
C	106	CCSRCH151J50
C	107	CKSRYB103K25
C	151	CKSRYB472K50
C	152	CKSQYB104K16
C	153	CEJA3R3M50
C	154	CKSQYB104K16
C	157	CEJA3R3M50
C	158	CKSYB474K16
C	159	CEJA220M6R3
C	160	CKSQYB104K16
C	161	CKSQYB104K16
C	162	CEJA3R3M50
C	163	CKSRYB102K50
C	170	CCSRCH100D50
C	201	CCSRCH471J50
C	202	CCSRCH100D50
C	203	CKSRYB332K50
C	204	CKSQYB473K16
C	205	CKSQYB473K16
C	206	CKSQYB104K16
C	207	CCSRCH560J50

=====Circuit Symbol & No.		===Part Name	Part No.
C	209		CKSQYB104K16
C	211		CCSRCH101J50
C	212		CEJA470M6R3
C	213		CKSRYB103K25
C	216		CCSRCH101J50
C	217		CEJA1R5M50
C	219		CCSRCH471J50
C	220		CKSRYB103K25
C	230		CKSRYB103K25
C	231		CCSRCH330J50
C	232		CCSRCH150J50
C	233		CKSQYB104K16
C	234		CEJA330M10
C	235		CKSRYB332K50
C	236		CKSQYB473K16
C	237		CCSRCH120J50
C	239		CKSRYB472K50
C	240		CEJAR47M50
C	241		CKSQYB104K16
C	242		CEJAR47M50
C	243		CEJAR33M50
C	244		CKSQYB473K16
C	245		CKSRYB333K16
C	246		CKSQYB473K16
C	250		CCSRCH471J50

C Unit Number : CWM6041(MEH-P5000RII/EW)
Unit Name : Keyboard Unit

MISCELLANEOUS

IC	901	IC	PD6277A
IC	902	IC	LC75874W
IC	903		RS-140
Q	901	Transistor	IMH10A
Q	903	Transistor	IMH10A
Q	904	Transistor	IMH10A
Q	905	Transistor	IMH10A
Q	906	Transistor	DTC143TK
Q	907	Transistor	2SC2412K
D	901	Diode	MA153
D	902	Diode	MA153
D	903	LED	NSPWF50BS-8452
D	904	LED	NSPWF50BS-8452
D	907	LED	NSPWF50BS-8452
D	908	LED	NSPWF50BS-8452
D	909	LED	CL170DCD
D	910	LED	CL170DCD
D	911	LED	CL170PGCD
D	912	LED	CL170PGCD
D	913	LED	CL170DCD
D	914	LED	CL170PGCD
D	915	LED	CL170UBX
L	901	Inductor	LCTB4R7K3216
X	901	Radiator 5.00MHz	CSS1423
S	901	Switch	CSG1115
S	902	Switch	CSG1113
S	903	Switch	CSG1113
S	904	Switch	CSG1113
S	905	Switch	CSG1113
S	906	Switch	CSG1113
S	907	Switch	CSG1113
S	908	Switch	CSG1043
S	909	Switch	CSG1043
S	910	Switch	CSG1113
S	911	Switch	CSG1113
S	912	Switch	CSG1113
S	913	Switch	CSG1113
S	914	Switch	CSG1113
S	915	Switch	CSG1113
S	916	Switch	CSG1113

=====Circuit Symbol & No.		===Part Name	Part No.
S	917	Switch	CSG1113
S	918	Switch	CSG1113
S	919	Switch	CSG1113
S	920	Switch	CSG1113
S	921	Switch	CSG1113
S	922	Switch	CSG1113
S	923	Switch	CSG1113
		LCD	CAW1490

RESISTORS

R	901		RS1/10S222J
R	902		RS1/10S222J
R	903		RS1/10S103J
R	904		RS1/10S121J
R	905		RS1/10S2R2J
R	907		RA4C102J
R	908		RS1/16S102J
R	909		RS1/16S102J
R	910		RA4C102J
R	911		RA4C102J
R	912		RA4C103J
R	913		RS1/8S751J
R	915		RS1/8S751J
R	916		RS1/16S472J
R	917		RS1/16S472J
R	918		RS1/16S472J
R	919		RS1/16S473J
R	920		RA4C102J
R	921		RS1/16S472J
R	922		RS1/16S472J
R	923		RS1/16S472J
R	924		RS1/10S472J
R	925		RS1/8S751J
R	926		RS1/8S751J
R	928		RS1/8S751J
R	929		RS1/8S181J
R	930		RS1/8S181J
R	931		RS1/8S121J
R	932		RS1/8S121J
R	933		RS1/8S121J
R	934		RS1/8S121J
R	935		RS1/8S121J
R	936		RS1/8S121J
R	937		RS1/8S121J
R	938		RS1/8S121J
R	939		RS1/8S121J
R	940		RS1/8S121J
R	941		RS1/8S181J
R	942		RS1/8S181J
R	943		RS1/8S121J
R	944		RS1/8S121J
R	949		RS1/8S242J
R	950		RS1/10S103J
R	1001		RS1/8S242J
R	1002		RS1/8S242J
R	1003		RS1/8S242J
R	1004		RS1/8S751J
R	1005		RS1/8S751J
R	1007		RS1/10S0R0J
R	1009		RS1/8S751J
R	1010		RS1/8S181J
R	1011		RS1/8S181J
R	1012		RS1/8S751J

CAPACITORS

C	902	CSZSR100M6R3
C	903	CSZSR100M6R3
C	904	CKSQYB473K16
C	905	CKSQYB104K16
C	906	CKSQYB681K50

=====Circuit Symbol & No.	===	Part Name	Part No.
C	907		CKSQYB104K16
C	908		CKSQYB104K16
C	909		CKSQYB104K16
C	910		CKSQYB104K16
C	911		CKSQYB104K16
C	913		CKSQYB104K16
C	914		CKSQYB104K16
C	917		CKSQYB104K16
C	918		CKSQYB104K16
C	919		CKSQYB104K16

C Unit Number : CWM6067(MEH-P5000/UC)
Unit Name : Keyboard Unit

MISCELLANEOUS

IC	901	IC	PD6277A
IC	902	IC	LC75874W
IC	903		RS-140
Q	907	Transistor	2SC2412K
D	901	Diode	MA153
D	902	Diode	MA153
D	903	LED	NSPWF50BS-8452
D	904	LED	NSPWF50BS-8452
D	907	LED	NSPWF50BS-8452
D	908	LED	NSPWF50BS-8452
D	909	LED	CL170PGCD
D	910	LED	CL170PGCD
D	913	LED	CL170PGCD
D	915	LED	CL170UBX
L	901	Inductor	LCTB4R7K3216
X	901	Radiator 5.00MHz	CSS1423
S	901	Switch	CSG1107
S	902	Switch	CSG1112
S	903	Switch	CSG1112
S	904	Switch	CSG1112
S	905	Switch	CSG1112
S	906	Switch	CSG1112
S	907	Switch	CSG1112
S	908	Switch	CSG1043
S	909	Switch	CSG1043
S	910	Switch	CSG1112
S	911	Switch	CSG1112
S	912	Switch	CSG1112
S	913	Switch	CSG1112
S	914	Switch	CSG1112
S	915	Switch	CSG1112
S	916	Switch	CSG1112
S	917	Switch	CSG1112
S	918	Switch	CSG1112
S	919	Switch	CSG1112
S	920	Switch	CSG1112
S	921	Switch	CSG1112
S	922	Switch	CSG1112
S	923	Switch	CSG1112
		LCD	CAW1491

RESISTORS

R	901		RS1/10S222J
R	902		RS1/10S222J
R	903		RS1/10S103J
R	904		RS1/10S121J
R	905		RS1/10S2R2J
R	907		RA4C102J
R	908		RS1/16S102J
R	909		RS1/16S102J
R	910		RA4C102J
R	911		RA4C102J

=====Circuit Symbol & No.	===	Part Name	Part No.
R	912		RA4C103J
R	913		RS1/8S751J
R	915		RS1/8S751J
R	916		RS1/16S472J
R	917		RS1/16S472J
R	918		RS1/16S472J
R	919		RS1/16S473J
R	920		RA4C102J
R	921		RS1/16S472J
R	922		RS1/16S472J
R	923		RS1/16S472J
R	924		RS1/10S472J
R	925		RS1/8S751J
R	926		RS1/8S751J
R	928		RS1/8S751J
R	929		RS1/8S181J
R	930		RS1/8S181J
R	931		RS1/8S121J
R	932		RS1/8S121J
R	933		RS1/8S121J
R	934		RS1/8S121J
R	935		RS1/8S121J
R	936		RS1/8S121J
R	937		RS1/8S121J
R	938		RS1/8S121J
R	939		RS1/8S121J
R	940		RS1/8S121J
R	941		RS1/8S181J
R	942		RS1/8S181J
R	943		RS1/8S121J
R	944		RS1/8S121J
R	947		RS1/10S0R0J
R	948		RS1/10S0R0J
R	1004		RS1/8S751J
R	1005		RS1/8S751J
R	1006		RS1/10S0R0J
R	1007		RS1/10S0R0J
R	1009		RS1/8S751J
R	1010		RS1/8S181J
R	1011		RS1/8S181J
R	1012		RS1/8S751J

CAPACITORS

C	902		CSZSR100M6R3
C	903		CSZSR100M6R3
C	904		CKSQYB473K16
C	905		CKSQYB104K16
C	906		CKSQYB681K50
C	907		CKSQYB104K16
C	908		CKSQYB104K16
C	909		CKSQYB104K16
C	910		CKSQYB104K16
C	911		CKSQYB104K16
C	913		CKSQYB104K16
C	914		CKSQYB104K16
C	917		CKSQYB104K16
C	918		CKSQYB104K16
C	919		CKSQYB104K16

C Unit Number : CWM6042(MEH-P5050/ES)
Unit Name : Keyboard Unit

MISCELLANEOUS

IC	901	IC	PD6277A
IC	902	IC	LC75874W
IC	903		RS-140
Q	907	Transistor	2SC2412K
D	901	Diode	MA153

=====Circuit Symbol & No.		===Part Name	Part No.
D	902	Diode	MA153
D	903	LED	NSPWF50BS-8452
D	904	LED	NSPWF50BS-8452
D	907	LED	NSPWF50BS-8452
D	908	LED	NSPWF50BS-8452
D	909	LED	CL170PGCD
D	910	LED	CL170PGCD
D	913	LED	CL170PGCD
D	915	LED	CL170UBX
L	901	Inductor	LCTB4R7K3216
X	901	Radiator 5.00MHz	CSS1423
S	901	Switch	CSG1107
S	902	Switch	CSG1112
S	903	Switch	CSG1112
S	904	Switch	CSG1112
S	905	Switch	CSG1112
S	906	Switch	CSG1112
S	907	Switch	CSG1112
S	908	Switch	CSG1043
S	909	Switch	CSG1043
S	910	Switch	CSG1112
S	911	Switch	CSG1112
S	912	Switch	CSG1112
S	913	Switch	CSG1112
S	914	Switch	CSG1112
S	915	Switch	CSG1112
S	916	Switch	CSG1112
S	917	Switch	CSG1112
S	918	Switch	CSG1112
S	919	Switch	CSG1112
S	920	Switch	CSG1112
S	921	Switch	CSG1112
S	922	Switch	CSG1112
S	923	Switch	CSG1112
		LCD	CAW1491

RESISTORS

R	901		RS1/10S222J
R	902		RS1/10S222J
R	903		RS1/10S103J
R	904		RS1/10S121J
R	905		RS1/10S2R2J
R	907		RA4C102J
R	908		RS1/16S102J
R	909		RS1/16S102J
R	910		RA4C102J
R	911		RA4C102J
R	912		RA4C103J
R	913		RS1/8S751J
R	915		RS1/8S751J
R	916		RS1/16S472J
R	917		RS1/16S472J
R	918		RS1/16S472J
R	919		RS1/16S473J
R	920		RA4C102J
R	921		RS1/16S472J
R	922		RS1/16S472J
R	923		RS1/16S472J
R	924		RS1/10S472J
R	925		RS1/8S751J
R	926		RS1/8S751J
R	928		RS1/8S751J
R	929		RS1/8S181J
R	930		RS1/8S181J
R	931		RS1/8S121J
R	932		RS1/8S121J
R	933		RS1/8S121J

=====Circuit Symbol & No.		===Part Name	Part No.
R	934		RS1/8S121J
R	935		RS1/8S121J
R	936		RS1/8S121J
R	937		RS1/8S121J
R	938		RS1/8S121J
R	939		RS1/8S121J
R	940		RS1/8S121J
R	941		RS1/8S181J
R	942		RS1/8S181J
R	943		RS1/8S121J
R	944		RS1/8S121J
R	947		RS1/10S0R0J
R	948		RS1/10S0R0J
R	1004		RS1/8S751J
R	1005		RS1/8S751J
R	1006		RS1/10S0R0J
R	1007		RS1/10S0R0J
R	1009		RS1/8S751J
R	1010		RS1/8S181J
R	1011		RS1/8S181J
R	1012		RS1/8S751J

CAPACITORS

C	902		CSZSR100M6R3
C	903		CSZSR100M6R3
C	904		CKSQYB473K16
C	905		CKSQYB104K16
C	906		CKSQYB681K50
C	907		CKSQYB104K16
C	908		CKSQYB104K16
C	909		CKSQYB104K16
C	910		CKSQYB104K16
C	911		CKSQYB104K16
C	913		CKSQYB104K16
C	914		CKSQYB104K16
C	917		CKSQYB104K16
C	918		CKSQYB104K16
C	919		CKSQYB104K16

D Unit Number :1246840289
Unit Name :Main PCB

MISCELLANEOUS

IC	101	IC	1245730345
IC	201	IC	1245730449
IC	202	IC	1245730502
IC	301	IC	1245730310
IC	302	IC	TC74VHC125FT
IC	303	IC	1245730310
IC	305	IC	TC7SH08F
IC	306	IC	TC7SH08F
IC	401	IC	1245730513
IC	402	IC	1245730376
IC	403	IC	1245730309
IC	501	IC	1245730515
IC	601	IC	BA5985FM
IC	801	IC	1245730444
IC	811	IC	NJM2904V
IC	861	IC	1245730311
Q	401	Transistor	DTC144EE
Q	402		1245760006
Q	403	Transistor	DTA114TE
Q	703	Transistor	2SA1037K
Q	704	Transistor	DTC114EE
Q	705	Transistor	2SC4213
Q	706	Transistor	2SC4213
Q	801	Transistor	1245760001
Q	802	FET	2SK1830

Circuit Symbol & No.		Part Name	Part No.
Q	821	Transistor	2SA1244LB
Q	822	Transistor	2SC4081
Q	841	Transistor	2SA1244LB
Q	842	Transistor	2SC4081
D	701	Diode	1115700031
L	101	Inductor	1246140017
L	201	Inductor	1246140016
L	202	Inductor	1306140318
L	501	Inductor	1246140016
L	600	Inductor	1246120014
L	801	Inductor	1246140014
L	842	Inductor	1246120002
XL	201	Ceramic Resonator 33.868MHz	1245790011
XL	401	Ceramic Resonator 5.64MHz	1245790006

RESISTORS

R	101		RS1/16SS104J
R	102		RS1/16SS563J
R	111		RS1/16SS223J
R	112		RS1/16SS223J
R	113		RS1/16SS223J
R	114		RS1/16SS223J
R	131		RS1/16SS1R0J
R	132		RS1/16SS103J
R	161		RS1/16SS122J
R	204		RS1/16SS102J
R	222		RS1/16SS105J
R	303		RS1/16SS103J
R	304		RS1/16SS332J
R	305		RS1/16SS473J
R	306		RS1/16SS681J
R	307		RS1/16SS681J
R	308		RS1/16SS681J
R	309		RS1/16SS681J
R	310		RS1/16SS681J
R	311		RS1/16SS102J
R	312		RS1/16SS102J
R	351		RS1/16SS681J
R	352		RS1/16SS101J
R	403		RS1/16SS223J
R	404		RS1/16SS223J
R	406		RS1/16SS223J
R	407		RS1/16SS223J
R	408		RS1/16SS223J
R	409		RS1/16SS223J
R	411		RS1/16SS104J
R	412		RS1/16SS103J
R	413		RS1/16SS102J
R	414		RS1/16SS102J
R	415		RS1/16SS102J
R	431		RS1/16SS104J
R	432		RS1/16SS104J
R	433		RS1/16SS104J
R	441		RS1/16SS102J
R	442		RS1/16SS102J
R	443		RS1/16SS102J
R	444		RS1/16SS102J
R	445		RS1/16SS102J
R	446		RS1/16SS102J
R	448		RS1/16SS103J
R	601		RS1/16SS103J
R	610		RS1/16SS123J
R	611		RS1/16SS123J
R	614		RS1/16SS682J
R	616		RS1/16SS682J
R	622		RS1/16SS103J

Circuit Symbol & No.		Part Name	Part No.
R	624		RS1/16SS103J
R	628		RS1/16SS822J
R	629		RS1/16SS822J
R	630		RS1/16SS104J
R	631		RS1/16SS104J
R	634		RS1/16SS104J
R	636		RS1/16SS104J
R	638		RS1/16SS104J
R	640		RS1/16SS104J
R	642		RS1/16SS823J
R	644		RS1/16SS823J
R	713		RS1/16SS104J
R	714		RS1/16SS104J
R	717		RS1/16SS561J
R	718		RS1/16SS561J
R	719		RS1/16SS102J
R	720		RS1/16SS102J
R	801		RS1/16SS223J
R	802		RS1/16SS471J
R	803		1245810051
R	804		1305810059
R	805		1245810088
R	806		1245810090
R	807		RS1/16SS473J
R	808		1245810098
R	821		1245810091
R	822		RS1/16SS101J
R	823		1245810087
R	824		1245810050
R	828		1245810082
R	841		1245810091
R	842		RS1/16SS101J
R	843		1245810087
R	844		1245810050
R	848		1245810082

CAPACITORS

C	101		CSZS100M10
C	102		CKSQYB105K16
C	103		CKSQYB105K16
C	104		CKSQYB104K25
C	106		CKSQYB224K16
C	107		CKSRYB123K25
C	109		CKSYB475K10
C	110		CKSQYB224K16
C	112		CKSRYB332K50
C	113		CKSRYB333K16
C	114		CCSRCH331J50
C	121		CCSRCH271J50
C	122		CCSRCH271J50
C	123		CCSRCH391J50
C	124		CCSRCH391J50
C	165		CKSRYB333K16
C	166		CKSYB475K10
C	201		CSZSR330M10
C	202		CSZS100M10
C	203		CKSRYB104K16
C	204		CKSRYB104K16
C	205		CKSQYB105K16
C	301		CKSRYB104K16
C	302		CKSRYB104K16
C	303		CKSRYB104K16
C	305		CKSRYB104K16
C	306		CKSRYB104K16
C	307		CKSQYB224K16
C	401		CKSQYB105K16
C	402		CKSYB105K16

=====Circuit Symbol & No.===Part Name			Part No.
C	403		CKSQYB105K16
C	405		CKSRYB104K16
C	501		1245900059
C	502		CKSYB105K16
C	503		CSZS100M10
C	504		CSZS100M10
C	505		CSZS100M10
C	600		1245920021
C	601		CKSYB105K16
C	603		CKSQYB105K16
C	610		CCSRSL681J50
C	611		CCSRSL681J50
C	612		CKSRYB122K50
C	613		CKSRYB122K50
C	616		CKSRYB562K50
C	617		CKSRYB562K50
C	620		CKSRYB223K25
C	621		CKSRYB223K25
C	705		CSZS100M10
C	706		CSZS100M10
C	707		CCSRCH151J50
C	708		CCSRCH151J50
C	801		CKSYB105K16
C	802		CKSRYB104K16
C	803		CKSYB105K16
C	804		1245900058
C	805		CKSYB105K16
C	806		1245900059
C	807		CKSYB105K16
C	808		CKSQYB184K16
C	810		CKSRYB103K25
C	821		CCSRSL681J50
C	824		1245900003
C	825		1245900059
C	826		1245900059
C	827		CCSRCH151J50
C	840		CKSYB105K16
C	841		CCSRSL681J50
C	842		CCSRCH151J50
C	843		CKSQYB224K16
C	844		1245900059
C	846		1245900059
C	847		1245900059
C	861		CKSYB105K16
C	862		1245900058

E Unit Number :1246840251
Unit Name :Mechanism PCB

SW	901	Spring Switch(LEAD)	CSN1033
SW	902	Switch(DISC ID)	1245300030
SW	903	Switch(DISK IN)	1245300030
R	901		RS1/16SS104J
R	902		RS1/16SS333J
R	903		RS1/16SS104J
C	901		CKSYB105K16
C	902		CKSYB105K16

F Unit Number :1246840145
Unit Name :Switch PCB

SW	651	Switch(LOAD END)	1305301313
SW	652	Switch(LOAD START)	1305301313
SW	653	Switch(EJECT END)	1305301313

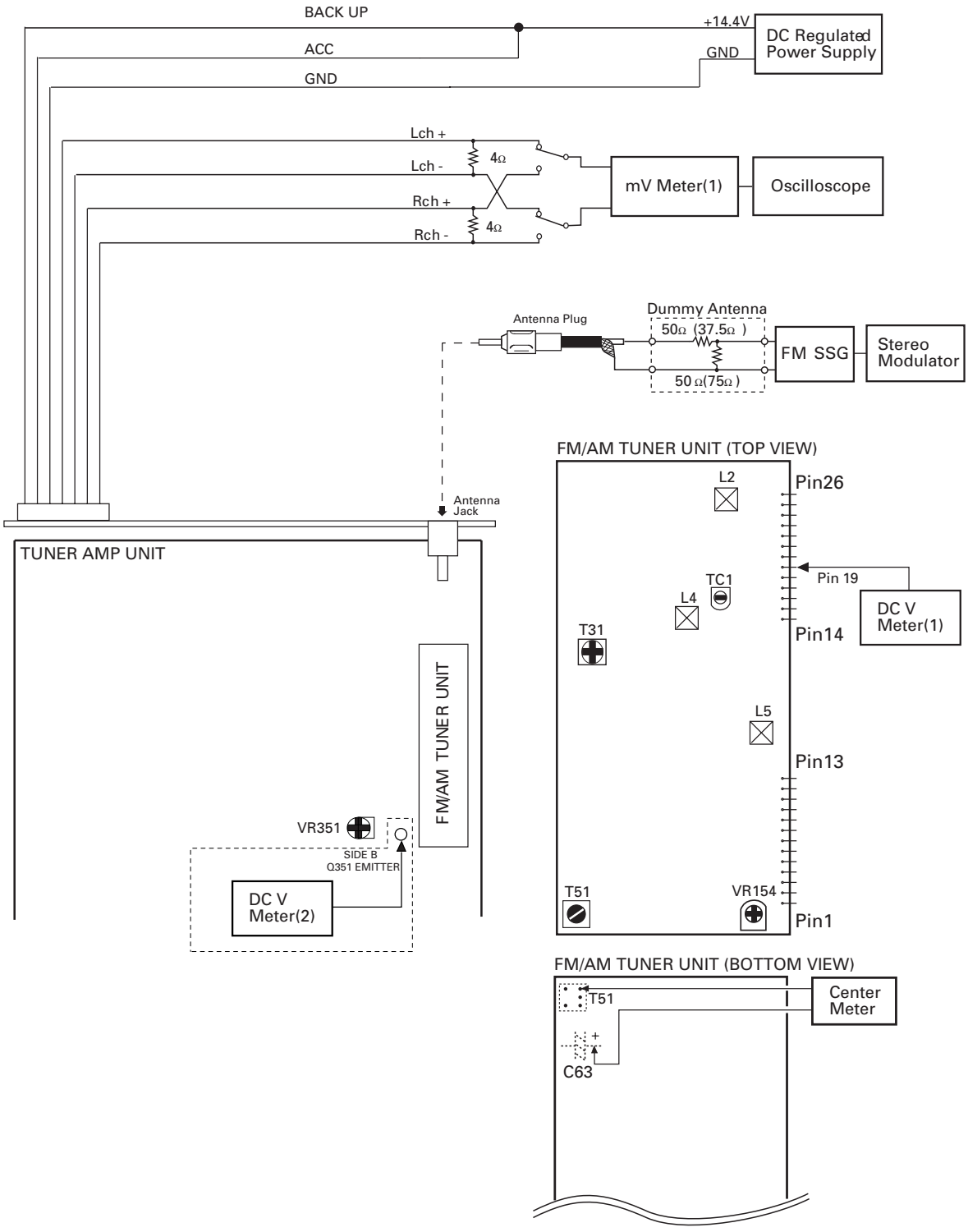
Miscellaneous Parts List

M	651	Motor(LOADING)	1246300043
M	901	Motor(SLIDE)	1246300073
M	902	Motor(SPINDLE)	1246300069
		Optical Pickup Assy	1246170028

6. ADJUSTMENT

6.1 TUNER ADJUSTMENT

● Connection Diagram



Modulation M:MONO MOD., 400Hz 30%(22.5kHz Dev.) or 400Hz 100%(75kHz Dev.)
S1:STEREO MOD., 1kHz, L or R=30%(20.25kHz+7.5kHz Dev.)
S2:STEREO MOD., 400Hz, L or R=60%(40.5kHz+7.5kHz Dev.)

NOTE:Before proceeding to further adjustments after switching power ON, let the tuner run for ten minutes to allow the circuits to stabilize.

FM ADJUSTMENT(MEH-P5000RII/EW)

		FM SSG		Displayed	Adjustment	Adjustment Method
	No.	Frequency(MHz)	Level(dBf)	Frequency(MHz)	Point	(Switch Position)
TUN Volt	1	•••••	•••••	108.0	L5	DC V Meter(1) : 6V
IF	2	98.1 M	60—100	98.1	T51	Center Meter : 0
ANT Coil	3	98.1 M	5	98.1	L2	mV Meter(1) : Maximum
RF Coil	4	98.1 M	5	98.1	L4	mV Meter(1) : Maximum
RF Trimmer	5	129.3 M	60—80	107.9	TC1	mV Meter(1) : Minimum
	6	RF Coil and RF Trimmer shall be adjusted twice or more				
IFT	7	98.1 M	5	98.1	T31	mV Meter(1) : Maximum (STEREO MODE)
ARC	8	98.1 S1	40	98.1	VR154	mV Meter(1) : Separation 5dB (STEREO MODE)

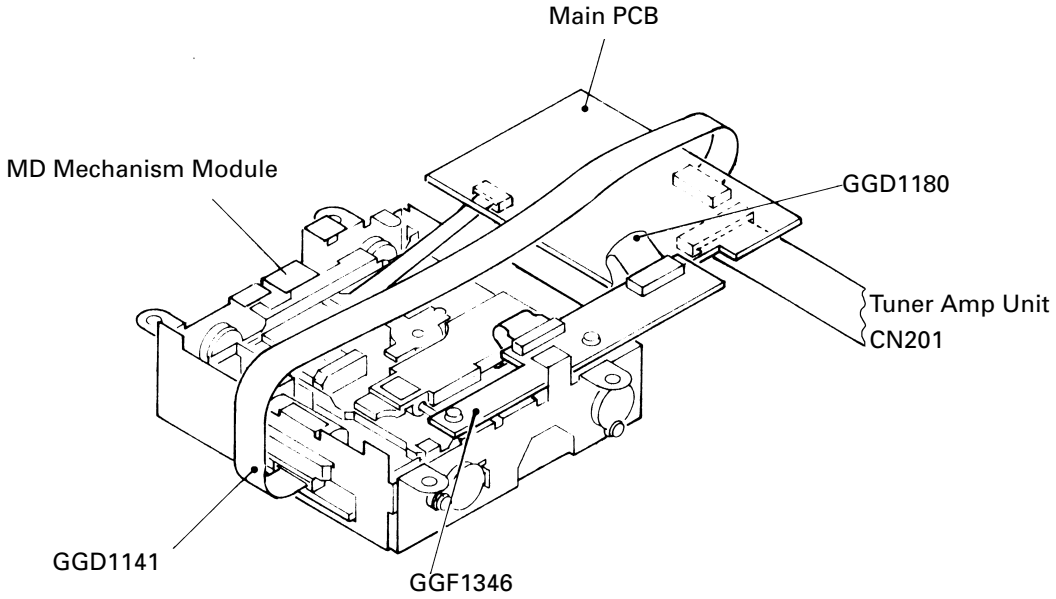
FM ADJUSTMENT(MEH-P5000/UC, MEH-P5050/ES)

		FM SSG		Displayed	Adjustment	Adjustment Method
	No.	Frequency(MHz)	Level(dBf)	Frequency(MHz)	Point	(Switch Position)
TUN Volt	1	•••••	•••••	107.9(UC) 108.0(ES)	L5	DC V Meter(1) : 6V
IF	2	98.1 M	60—100	98.1	T51	Center Meter : 0
ANT Coil	3	98.1 M	5	98.1	L2	mV Meter(1) : Maximum
RF Coil	4	98.1 M	5	98.1	L4	mV Meter(1) : Maximum
IFT	5	98.1 M	5	98.1	T31	mV Meter(1) : Maximum (STEREO MODE)
ARC	6	98.1 S1	40	98.1	VR154	mV Meter(1) : Separation 5dB (STEREO MODE)

RDS SL ADJUSTMENT

		FM SSG		Displayed	Adjustment	Adjustment Method
	No.	Frequency(MHz)	Level(dBf)	Frequency(MHz)	Point	(Switch Position)
	1	104.0 S2	35	104.0	VR351	DC V Meter(2) : 1.75V+0.05V -0.35V

6.2 MD MECHANISM MODULE ADJUSTMENT



● About test disc

Use a low reflection disc (MMD-211) for preliminary auto tuning (AUTO1).
Use a high reflection disc (MMD-110), low reflection disc (MMD-211) for ATT auto tuning (AUTO2).
Disc No. : TEAC MMD-211B or MMD-212B
Tool No. : GGF1328

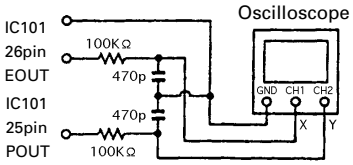
1. Be sure to perform "preliminary auto tuning" when you exchanged a PCB, Mechanism Unit, or Pickup Unit.

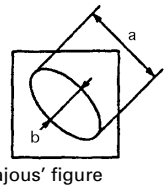
2. Let TP421 and TP435 (IC402: pin6, pin8) short circuited before preliminary auto tuning or overwriting EE-PROM (IC402) to clear protection on EE-PROM.
   * To overwrite EE-PROM, please see page 9 of the CX-893 Service Manual.

● How to tune optical pick up grating

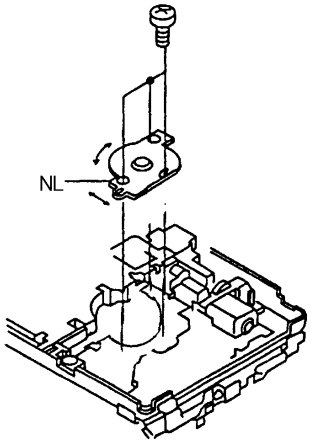
Adjust Lissajous' figure (x-y) of EOUT (TP131) to FOUT (TP130) after automatically adjusting in a test mode AUTO2 using a high reflection disc.

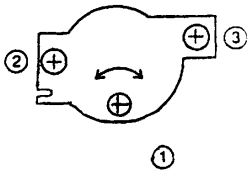
1. Loosen the three screws of the spinning motor and adjust checking Lissajous' figure.
2. After the tuning is completed, tighten the screws ①, ②, and ③, in that order.
3. Check Lissajous' figure again.





Lissajous' figure
Within the range a:b = 3:1

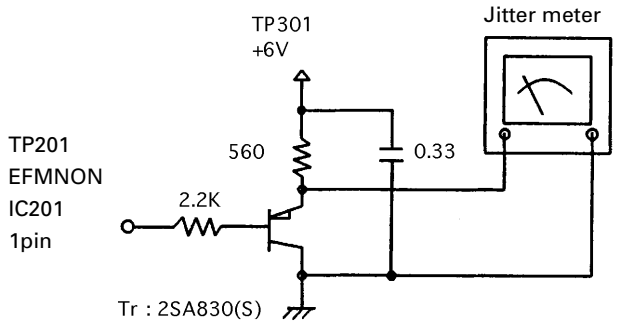




Check Lissajous' figure while shifting positions to which the spinning motor is mounted.

● About tuning of jitter and how to tune it

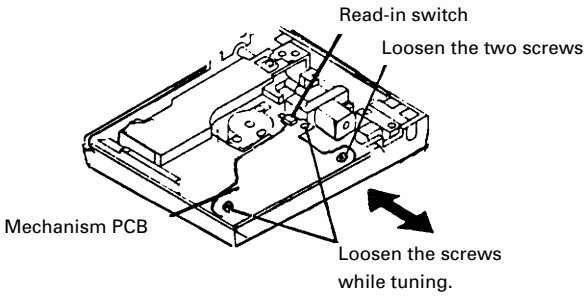
Use the following circuit as a tool to measure jitter.



Check jitter value of EFM with the step continuous play in TESTPLAY mode after automatically tuning in a test mode AUTO2 (ATT auto tuning) using a low reflection disc.

● How to tune the position of read-in switch

Check the sub code cluster value of the position of read-in switch in INNER mode. If the SUBQ value is outside the range between FF85 and FFD2, tighten the screws by shifting the mechanism PCB to the directions indicated with the arrow in the figure below, and then check the sub code cluster value of the position of read-in switch again.



7. GENERAL INFORMATION

7.1 DIAGNOSIS

7.1.1 TEST MODE

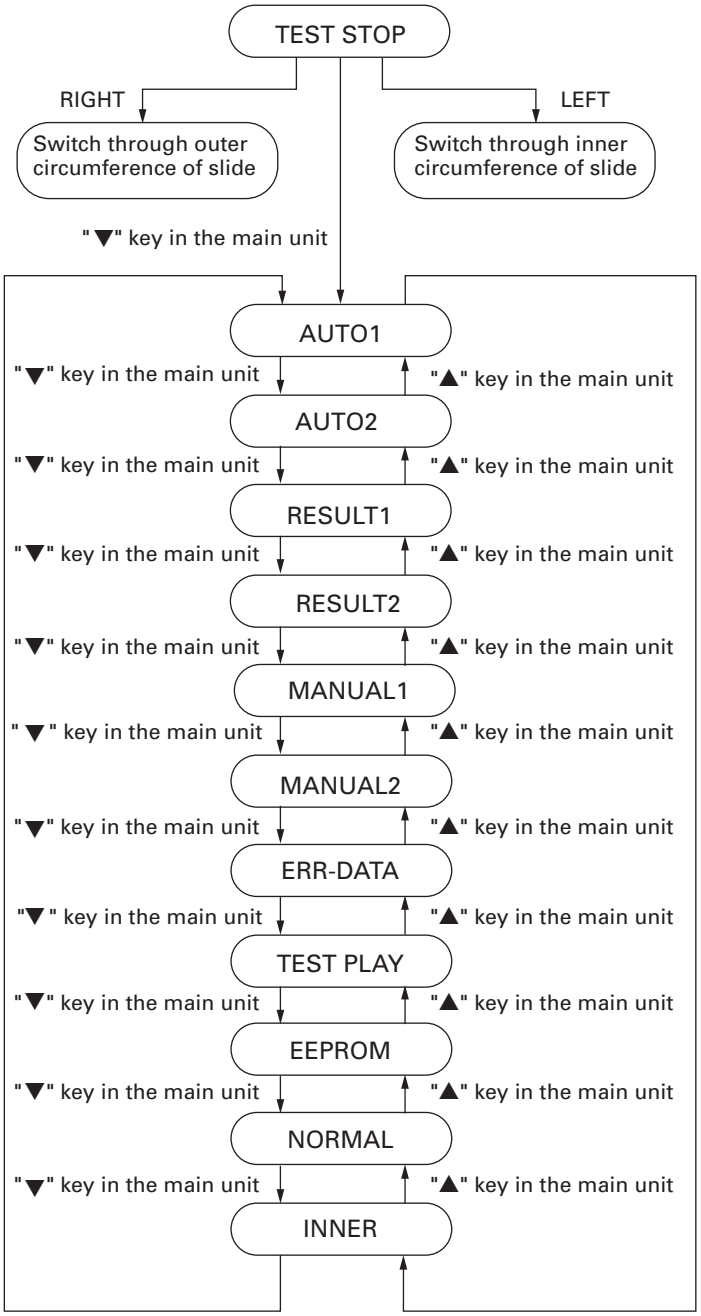
● **Specifications of test mode operation**

Test mode is used to tune the MD player part in this model.

- How to switch to test mode.
  Turn ACC and Back Up ON while holding down 4 key and 6 key.
- How to deselect test mode.
  Turn ACC and Back Up OFF.

Key name	Outline of key operations
BAND	Used to power ON/OFF.
►	Move through threads, jump, change settings, etc.
◄	Move through threads, jump, change settings, etc.
▲	Switch through MENU in the forward direction.
▼	Switch through MENU in the backward direction.
SCR	Switch to TEST STOP mode.
FUNCTION	Confirm the item you selected from MENU.
1	Changing display.

● Menus in Test Mode



: STOP test mode

: Preliminary auto tuning menu

: ATT auto tuning checking menu

: Preliminary auto tuning checing menu

: ATT auto tuning checking menu

: Preliminary manual tuning menu

: ATT manual tuning menu

: Error history displaying menu

: Continuous playing menu

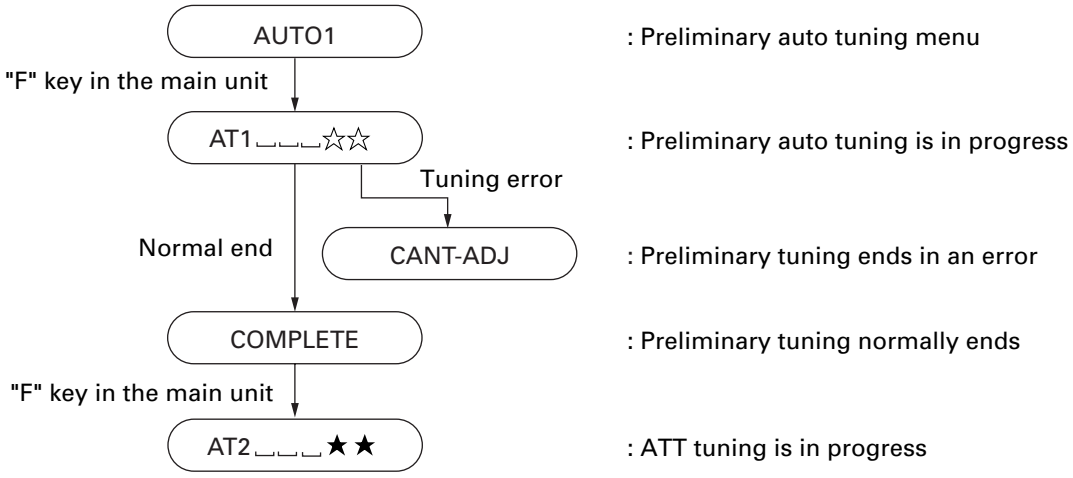
: EEPROM setting menu

: Test mode normal playing menu

: INNER switch position measuring menu

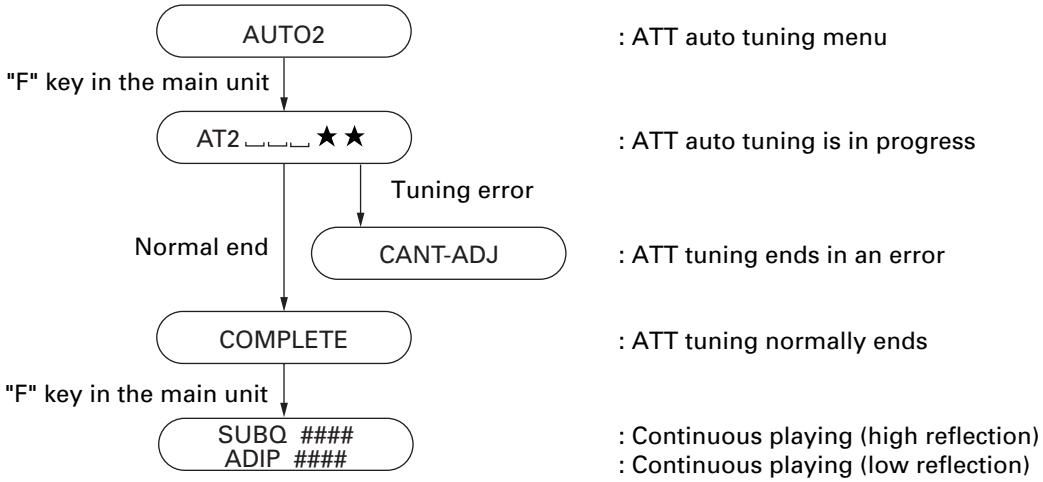
* Pressing "SCR" key in the main unit in each status switches to "TEST STOP" .

● **Preliminary auto tuning**



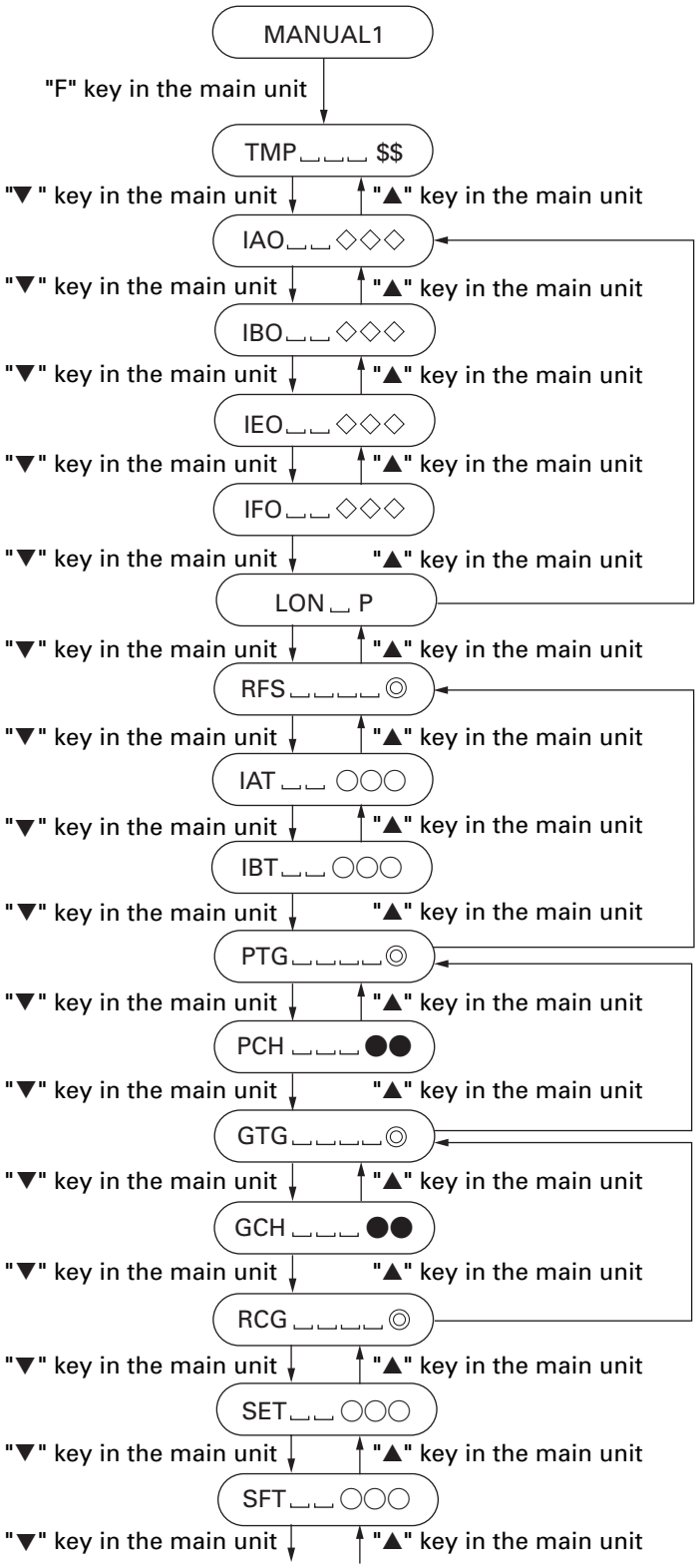
* Pressing "SCR" key in the main unit in each status switches to "TEST STOP" .
* "☆☆" is one of the following tuning numbers:
  - 00 : Switch through most inner circumference
  - 02 : Tentative measurement of ABEF offset
  - 04 : Rough tuning of RF side focus gain
  - 05 : Tentative setting of focus ATT
  - 06 : Tuning of tracking gain in RF side pit part
  - 07 : COUT level setting for tuning pit part
  - 08 : Switch through outer circumference
  - 09 : Tuning of tracking gain in RF side groove part
  - 10 : COUT level setting for tuning groove part
  - 11 : Tuning of RF side TCRS gain
  - 12 : Initial setting of tracking ATT
  - 13 : Fine tuning of RF side focus gain
  - 14 : Initial setting of focus ATT
  - 15 : Measurement of S gain "High" ABEF offset
  - 16 : Measurement of TCRS offset
  - 17 : Measurement of S gain "Low" ABEF offset

● **ATT auto tuning**



* Pressing "SCR" key in the main unit in each status switches to "TEST STOP" .
* " ★★ " is one of the following tuning numbers:
  - 00 : Switch through most inner circumference
  - 03 : ATT setting of tracking in pit part
  - 04 : ATT setting of focus in pit part
  - 06 : Switch through outer circumference (low reflection only)
  - 07 : ATT setting of TCRS (low reflection only)
  - 08 : ATT setting of tracking in groove part (low reflection only)
  - 09 : ATT setting of focus in groove part (low reflection only)

● Preliminary manual tuning



: Preliminary manual tuning menu

: Temperature code display
$$: Temperature code

: Tentative setting of A signal offset (AINO)
◇◇◇ : Measured value

: Tentative setting of B signal offset (BINO)
◇◇◇ : Measured value

: Tentative setting of E signal offset (EINO)
◇◇◇ : Measured value

: Tentative setting of F signal offset (FINO)
◇◇◇ : Measured value

: Laser power on (Play power on)

: Rough tuning of RF side focus gain
◎ : Setting value of gain

: A-ATT (Focus) tentative setting
○○○ : ATT setting value

: B-ATT (Focus) tentative setting
○○○ : ATT setting value

: Tuning of tracking gain in RF side pit part
◎ : Setting value of gain

: COUT level setting for tuning pit part
●● : Setting value of COUT level

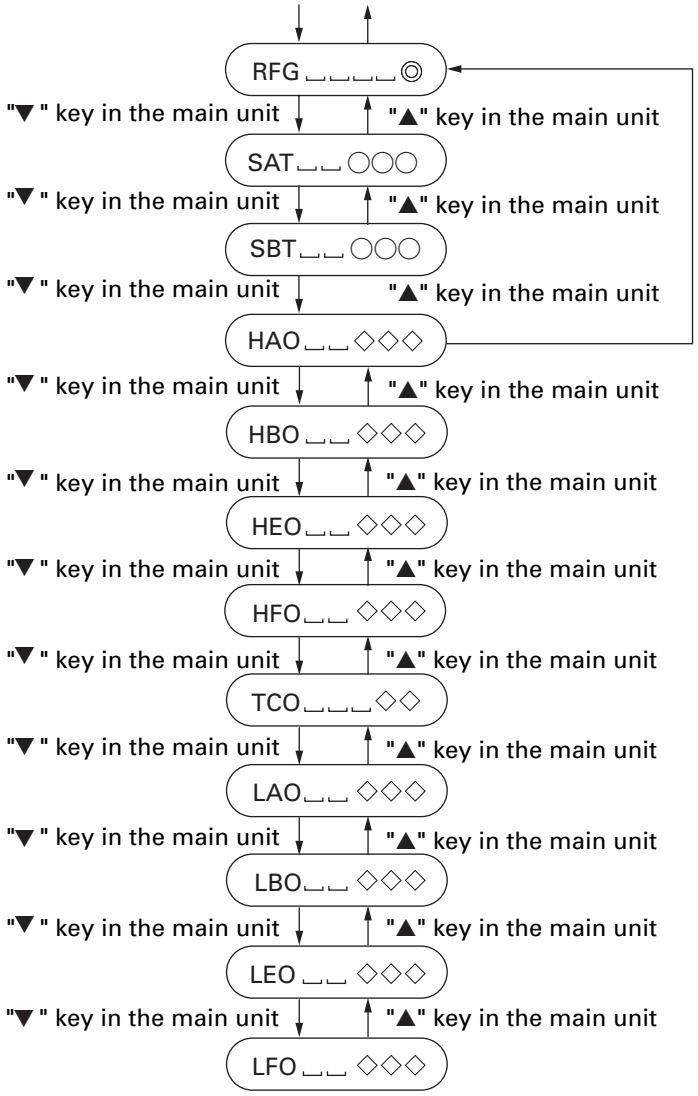
: Tuning of tracking gain in RF side grove part
◎ : Setting value of gain

: COUT level setting for tuning grove part
●● : Setting value of COUT level

: Tuning of RF side TCRS gain
◎ : Setting value of gain

: E-ATT (Tracking) initial setting
○○○ : ATT setting value

: F-ATT (Tracking) initial setting
○○○ : ATT setting value



: Fine tuning of RF side focus gain
◎: Setting value of gain

: A-ATT (Focus) initial setting
○○○ : ATT setting value

: B-ATT (Focus) initial setting
○○○ : ATT setting value

: Measurement of S gain "High" A signal offset (AINO)
◇◇◇ : Measured value

: Measurement of S gain "High" B signal offset (BINO)
◇◇◇: Measured value

: Measurement of S gain "High" E signal offset (EINO)
◇◇◇ : Measured value

: Measurement of S gain "High" F signal offset (FINO)
◇◇◇ : Measured value

: Measurement of TCRS signal offset (TCRSO)
◇◇: Measured value

: Measurement of S gain "Low" A signal offset (AINO)
◇◇◇ : Measured value

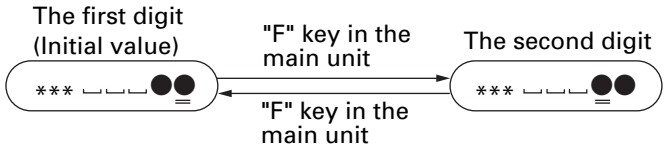
: Measurement of S gain "Low" B signal offset (BINO)
◇◇◇ : Measured value

: Measurement of S gain "Low" E signal offset (EINO)
◇◇◇ : Measured value

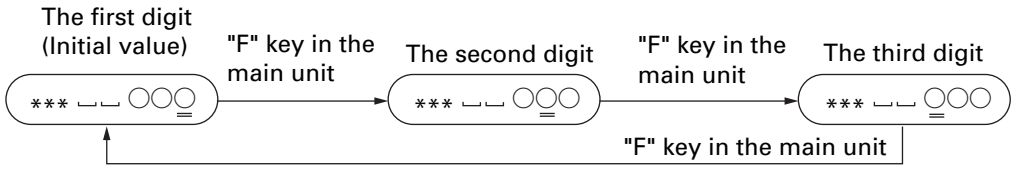
: Measurement of S gain "Low" F signal offset (FINO)
◇◇◇ : Measured value

* Pressing "SCR" key in the main unit in each status switches to "TEST STOP" .
* Pressing "F" key in the main unit in each status where a setting value is displayed changes the digit of the setting value that will be changed.

• When the setting value has two digits.



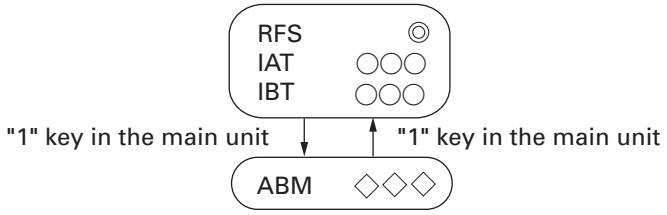
• When the setting value has three digits.



* Pressing VOL UP/DOWN key in each status where a setting value is displayed changes the value in the digit you selected in the range from 0H through FH. However, the setting value of RF side gain changes in the range from 0H through 6H.

*The display changes as follows by operating main unit "1" key.

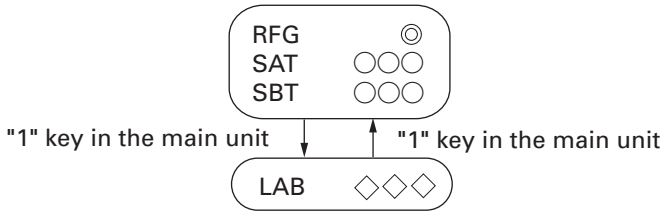
• ABMAXO measurement



: RF-side focus gain rough-tuning
: A-ATT (focus) pre-setting
: B-ATT (focus) pre-setting

: ABMAXO measurement display

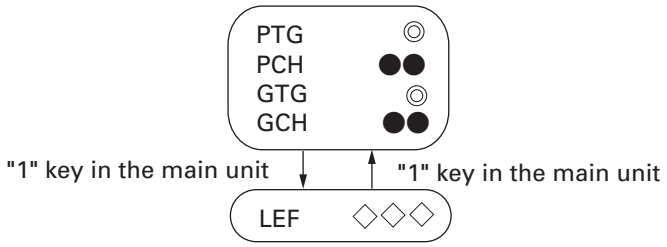
• LPFABO measurement



: RF-side focus gain fine-tuning
: A-ATT (focus) default setting
: B-ATT (focus) default setting

: LPFABO measurement display

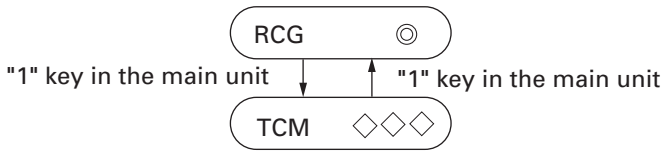
• LPFEFO measurement



: RF-side pit tracking gain tuning
: Pit tuning COUT level setting
: RF-side groove tracking gain tuning
: Groove tuning COUT level setting

: LPFEFO measurement display

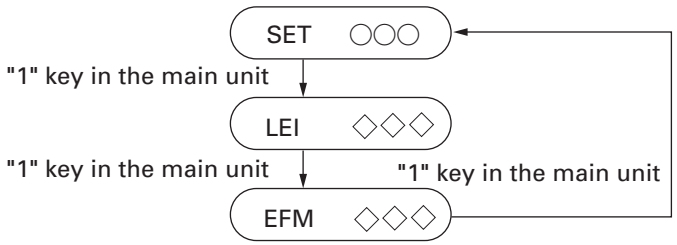
• TCRSMIO measurement



: RF-side TCRS gain tuning

: TCRSMIO measurement display

• LPFEINO/EFMIO measurement

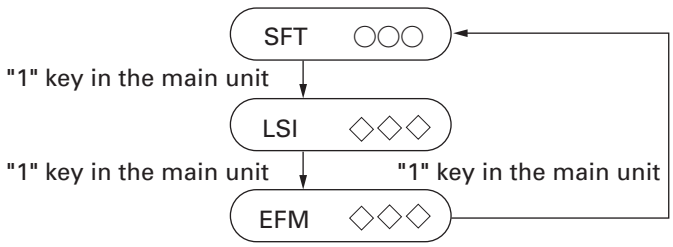


: E-ATT (tracking) default setting

: LPFEINO measurement display

: EFMIO measurement display

• LPFFINO/EFMIO measurement

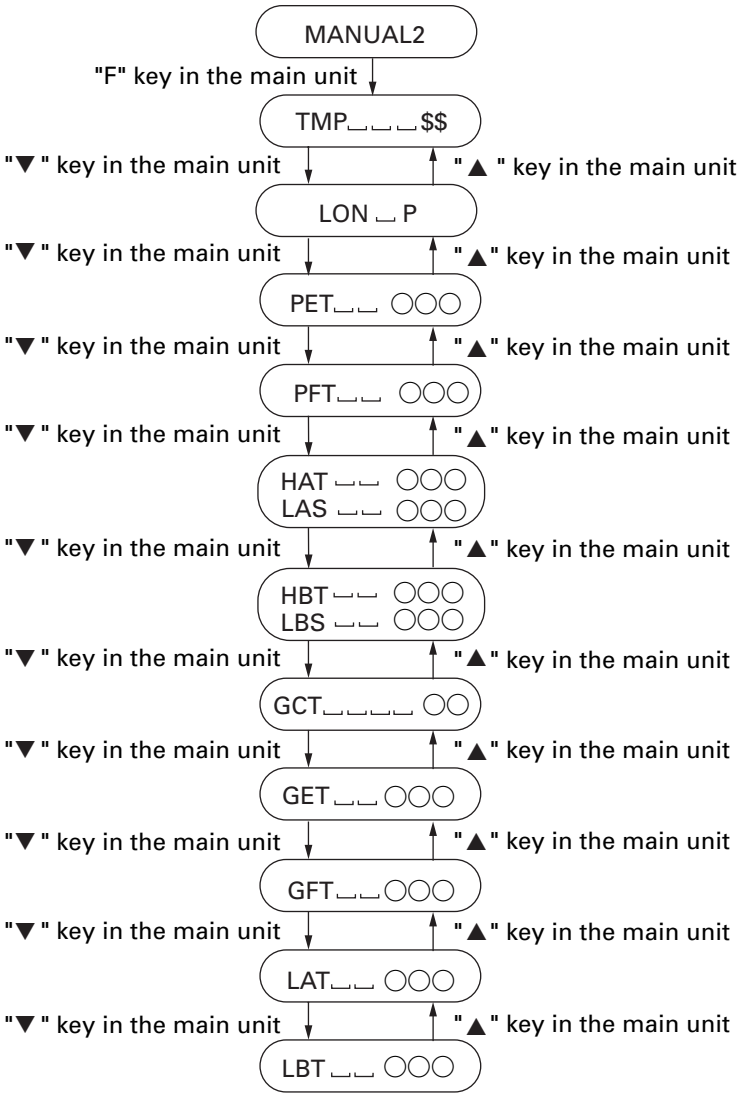


: F-ATT (tracking) default setting

: LPFFINO measurement display

: EFMIO measurement display

● ATT manual tuning



: ATT manual tuning menu

: Temperature code display
$$: Temperature code

: Laser power on (Play power on)

: E-ATT (Tracking) setting of pit part
○○○ : ATT setting value

: F-ATT (Tracking) setting of pit part
○○○ : ATT setting value

: Setting of high reflection A-ATT (Focus)
: Setting of low reflection A-ATT (Focus)
○○○ : ATT setting value

: Setting of high reflection B-ATT (Focus)
: Setting of low reflection B-ATT (Focus)
○○○ : ATT setting value

: ATT setting of TCRS
○○ : ATT setting value

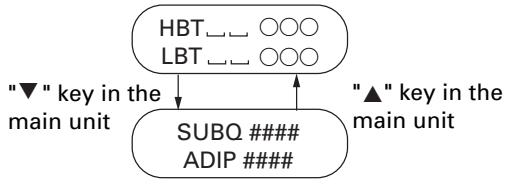
: Setting of E-ATT (Tracking) in groove part
○○○ : ATT setting value

: Setting of F-ATT (Tracking) in groove part
○○○ : ATT setting value

: Setting of low reflection A-ATT (Focus)
○○○ : ATT setting value

: Setting of low reflection B-ATT (Focus)
○○○ : ATT setting value

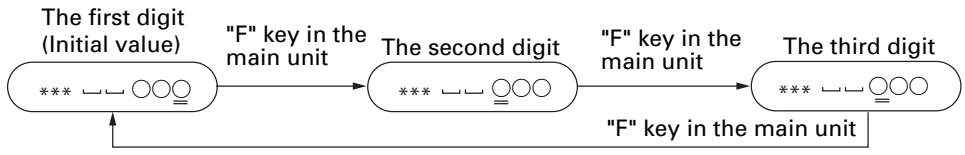
* Pressing "SCR" key in the main unit in each status switches to "TEST STOP" status.
* Pressing "F" key in the main unit in the B-ATT setting status switches to continuous play.
  Pressing "F key in the main unit in the continuous playing status switches to the B-ATT setting status in the ATT manual tuning.



: Setting of high reflection B-ATT (Focus) in pit part
: Setting of low reflection B-ATT (Focus) in pit part
: Setting of low reflection B-ATT (Focus) in groove part
○○○ : ATT setting value

: Continuous play (pit part)
: Address

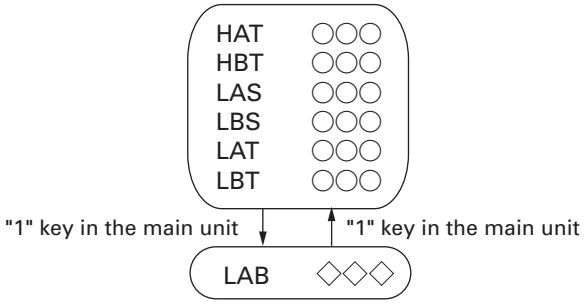
* Pressing "F" key in the main unit in each status where a setting value is displayed changes the digit of the setting value that will be changed.



* Pressing RIGHT/LEFT key in each status where a setting value is displayed changes the value in the digit you selected in the range from 0_H through F_H.

* The display changes as follows by operating main unit "1"key .

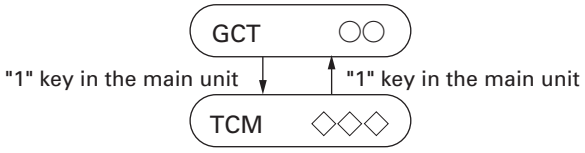
• LPFABO measurement



: High reflection pit A-ATT (focus) setting
: High reflection pit B-ATT (focus) setting
: Low reflection pit A-ATT (focus) setting
: Low reflection pit B-ATT (focus) setting
: Low reflection groove A-ATT (focus) setting
: Low reflection groove B-ATT (focus) setting

: LPFABO measurement display

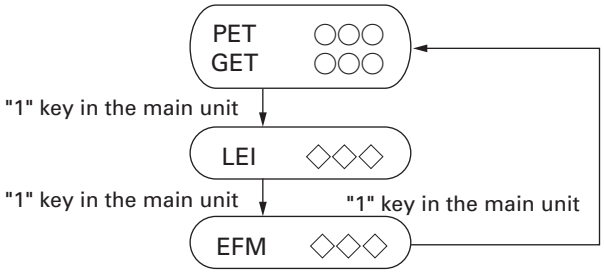
• TCRSMIO measurement



: TCRS ATT setting

: TCRSMIO measurement display

• LPFEINO/EFMIO measurement

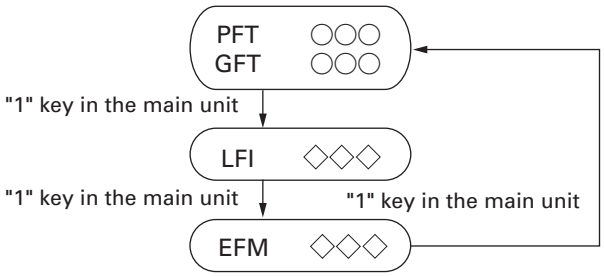


: Pit E-ATT (tracking) setting
: Groove E-ATT (tracking) setting

: LPFEINO measurement display

: EFMIO measurement display

• LPFFINO/EFMIO measurement

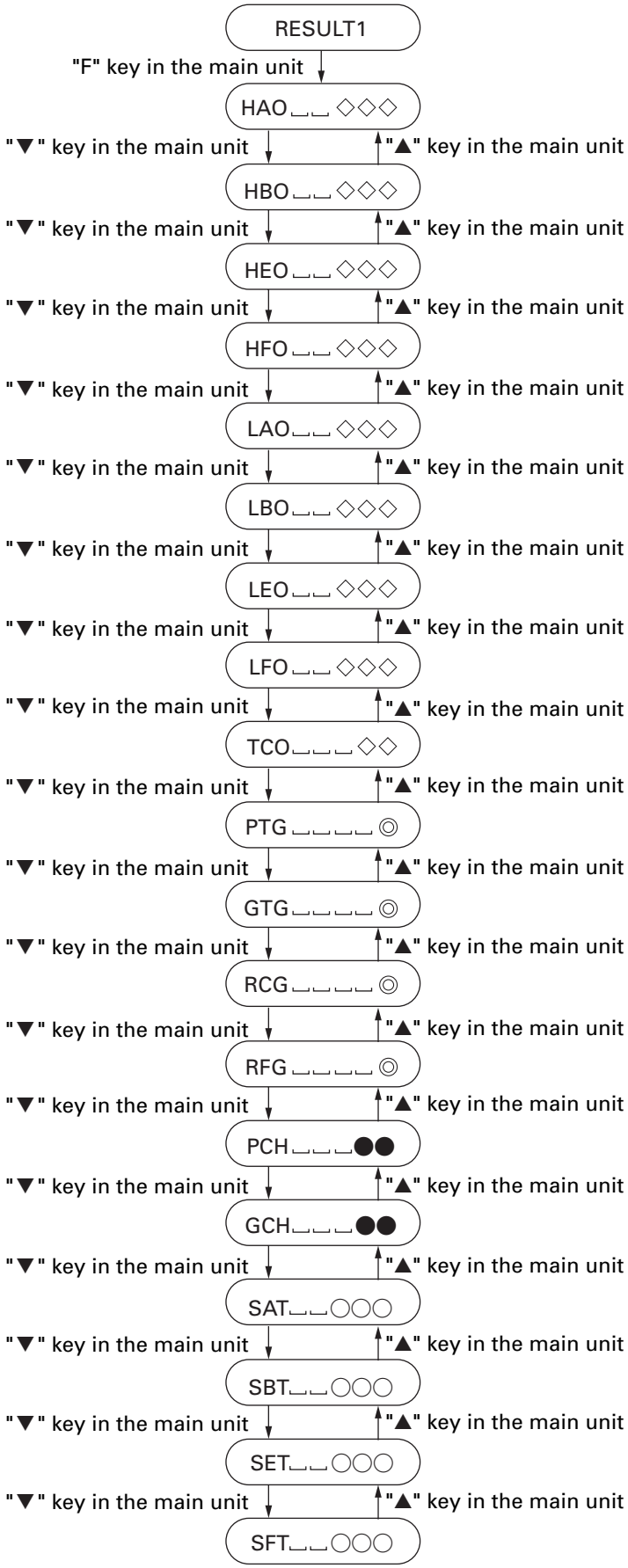


: Pit F-ATT (tracking) setting
: Groove F-ATT (tracking) setting

: LPFFINO measurement display

: EFMIO measurement display

● Checking preliminary tuned value



: Preliminary tuning checking menu

: Measured value of S gain "High" A signal offset (Setting value)

: Measured value of S gain "High" B signal offset (Setting value)

: Measured value of S gain "High" E signal offset (Setting value)

: Measured value of S gain "High" F signal offset (Setting value)

: Measured value of S gain "Low" A signal offset (Setting value)

: Measured value of S gain "Low" B signal offset (Setting value)

: Measured value of S gain "Low" E signal offset (Setting value)

: Measured value of S gain "Low" F signal offset (Setting value)

: Measured value of TCRS signal offset

: Measured value of tracking gain in RF side pit part

: Measured value of tracking gain in RF side groove part

: Measured value of RF side TCRS gain

: Measured value of RF side focus gain

: Setting value of COUT level for tuning pit part

: Setting value of COUT level for tuning groove part

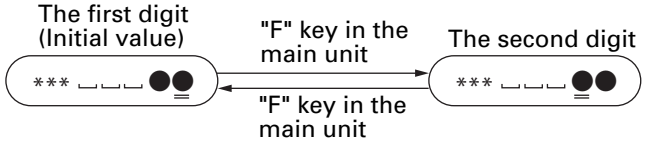
: Initial value of A-ATT (Focus)

: Initial value of B-ATT (Focus)

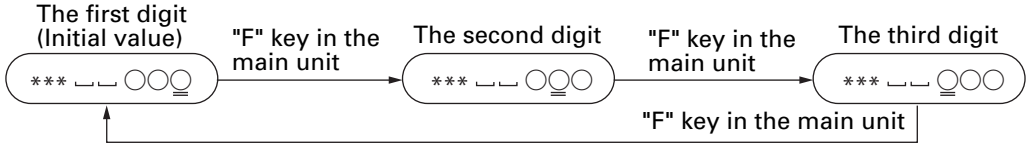
: Initial value of E-ATT (Tracking)

: Initial value of F-ATT (Tracking)

* Pressing "SCR" key in the main unit in each status switches to "TEST STOP" .
* Pressing "F "key in the main unit in each status where a setting value is displayed changes the digit of the setting value that will be changed.
  • When the setting value has two digits.

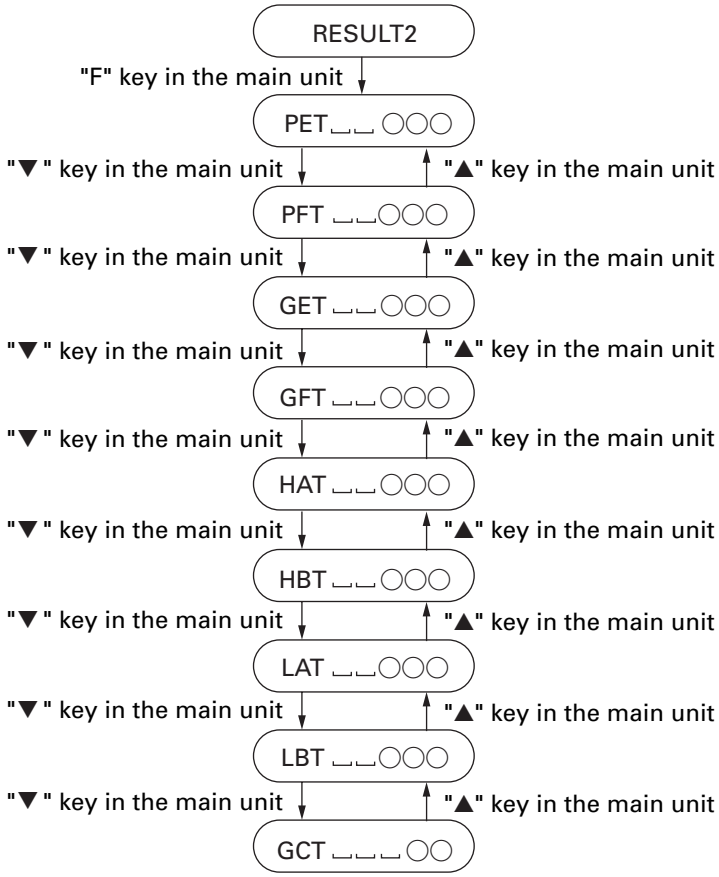


  • When the setting value has three digits.



* Pressing VOL UP/DOWN key in each status where a setting value is displayed changes the value in the digit you selected in the range from 0H through FH. However, the setting value of RF side gain changes in the range from 0H through 6H.

● Checking ATT setting value



: ATT value checking menu

: Setting value of E-ATT (Tracking) in pit part

: Setting value of F-ATT (Tracking) in pit part

: Setting value of E-ATT (Tracking) in grove part

: Setting value of F-ATT (Tracking) in grove part

: Setting value of high reflection A-ATT (Focus)

: Setting value of high reflection B-ATT (Focus)

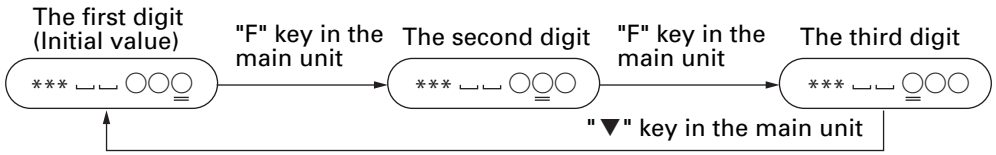
: Setting value of low reflection A-ATT (Focus)

: Setting value of low reflection B-ATT (Focus)

: Setting value of TCRS-ATT

* Pressing "SCR" key in the main unit in each status switches to "TEST STOP" .
* Pressing "F" key in the main unit in each status where a setting value is displayed changes the digit of the setting value that will be changed.

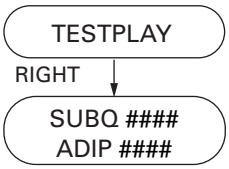
• When the setting value has three digits.


The first digit
(Initial value)
"F" key in the main unit
The second digit
"F" key in the main unit
The third digit
*** ␣␣ ○○○
"▼" key in the main unit

* Pressing RIGHT/LEFT key in each status where a setting value is displayed changes the value in the digit you selected in the range from 0_H through F_H.

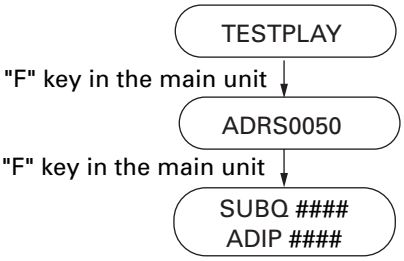
● Continuous play

• When you start continuous play with the position which is picked up.



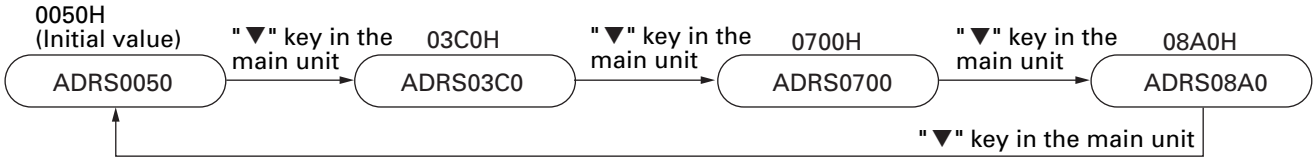
: Continuous play menu
: Continuous play (pit part)
: Continuous play (groove part)
: Address

• When you start continuous play with any address.

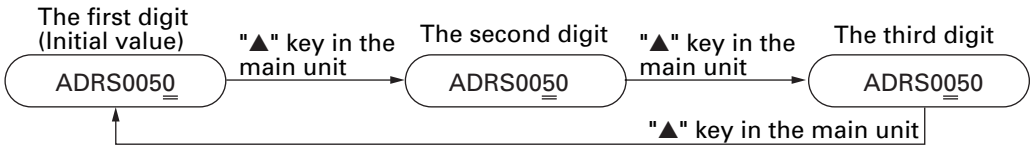


: Continuous play menu
: Specify the address from which you start playing.
: Continuous play (pit part)
: Continuous play (groove part)
: Address

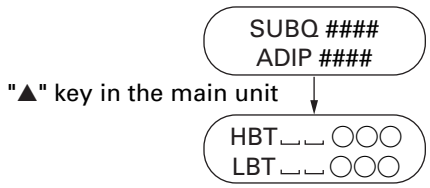
* Pressing "SCR" key in the main unit in each status switches to "TEST STOP" status.
* Pressing "▼" key in the main unit in the status where you specified the address to start playing switches the digit of the address that will be changed.



* Pressing "▲" key in the main unit in the status where you specified the address to start playing switches the digit of the address as shown below.

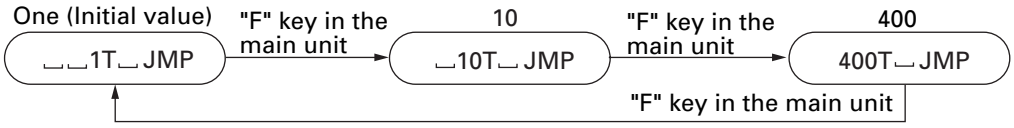


* Pressing RIGHT/LEFT key in each the status where you specified the address to start playing switches the value in the digit you selected in the range from 0_H through F_H.
* Pressing "▲" key in the main unit in the continuous play status switches to the B-ATT setting status in the ATT manual tuning.



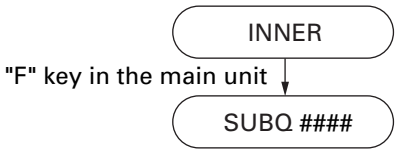
: Continuous play (pit part)
: Continuous play (groove part)
: Address
: B-ATT (Focus) setting of high reflection pit part
: B-ATT (Focus) setting of low reflection pit part
○○○ : ATT setting value

* Pressing "F" key in the main unit in switches the number of trucks to be jumped as shown below.



* Pressing RIGHT key in the continuous play status jumps the trucks by the number you specified in the direction of the outer circumference.
* Pressing LEFT key in the continuous play status jumps the trucks by the number you specified in the direction of the inner circumference.

● Measuring the position of INNER switch

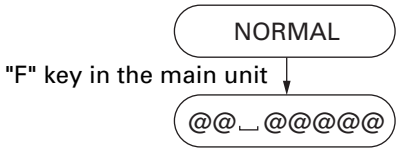


: INNER switch position measuring menu

: Continuous play (pit part)
: Address

* Pressing "SCR" key in the main unit in each status switches to "TEST STOP" .

● Test mode normal play

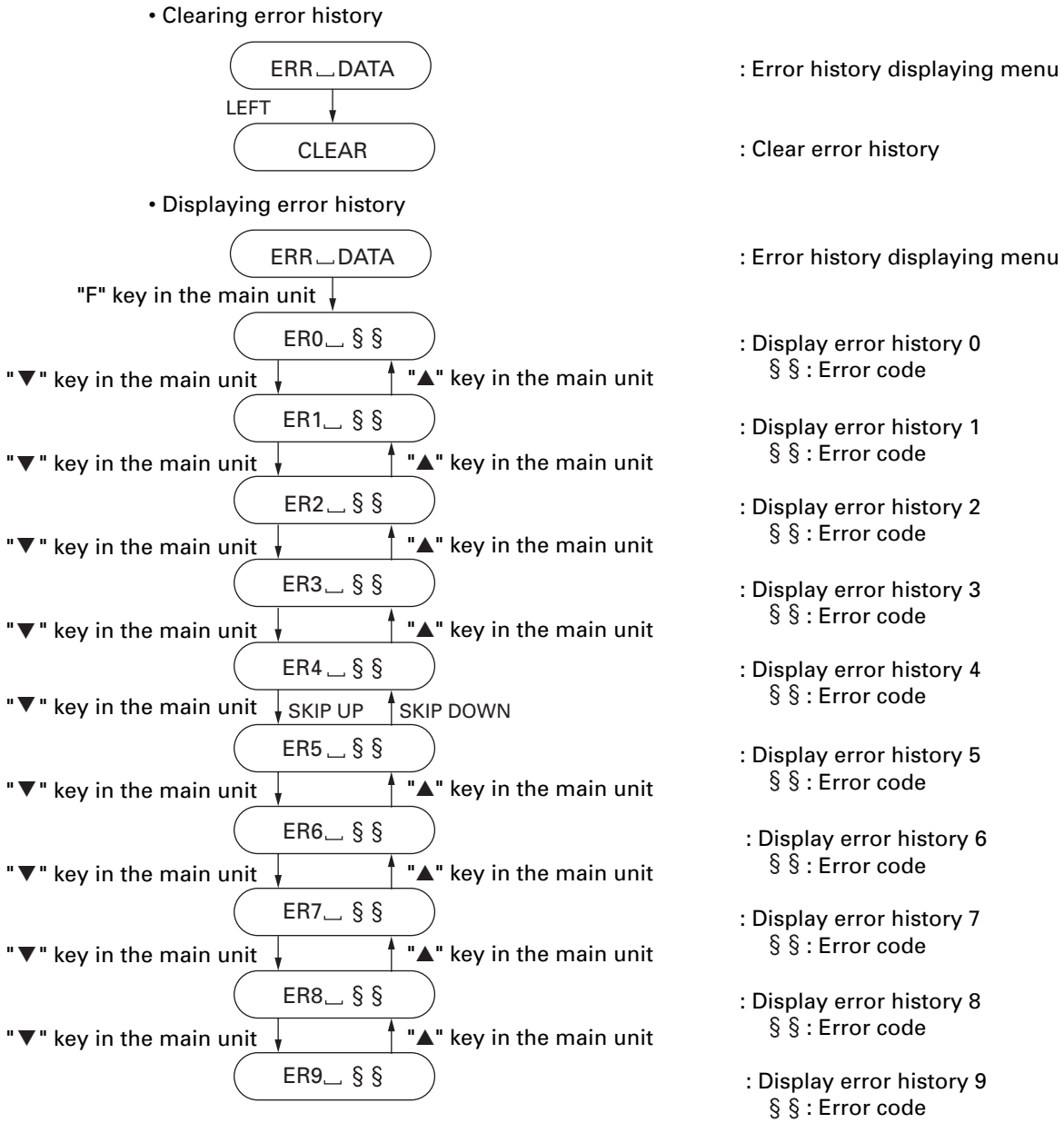


: Test mode normal playing menu

: Normal play mode
@@@@@@ : Mode and address

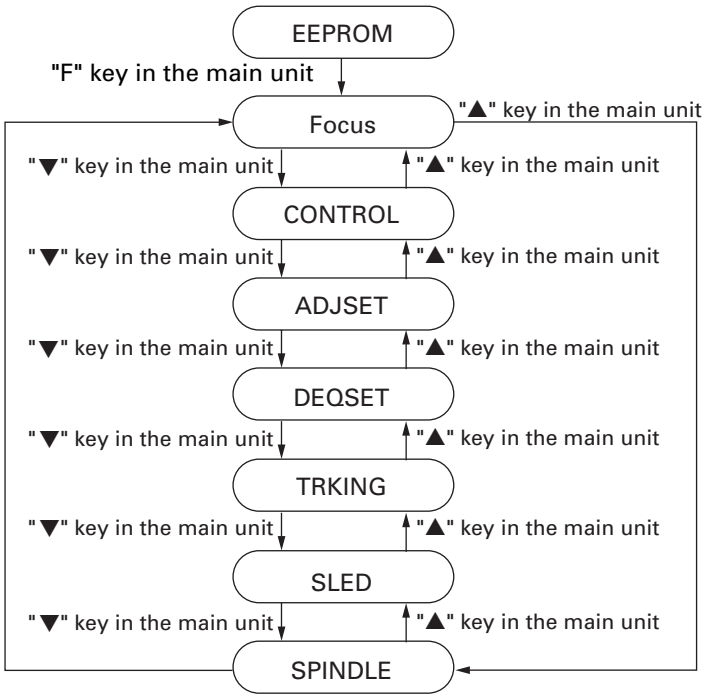
* Pressing "SCR" key in the main unit in each status switches to "TEST STOP" .

● Displaying error history



* Pressing "SCR" key in the main unit in each status switches to "TEST STOP" .

● Setting EEPROM


EEPROM
"F" key in the main unit
Focus
"▲" key in the main unit
"▼" key in the main unit
"▲" key in the main unit
CONTROL
"▼" key in the main unit
"▲" key in the main unit
ADJSET
"▼" key in the main unit
"▲" key in the main unit
DEQSET
"▼" key in the main unit
"▲" key in the main unit
TRKING
"▼" key in the main unit
"▲" key in the main unit
SLED
"▼" key in the main unit
"▲" key in the main unit
SPINDLE

: EEPROM setting menu

: Focus setting menu

: Control setting menu

: Tuning setting menu

: Digital EQ setting menu

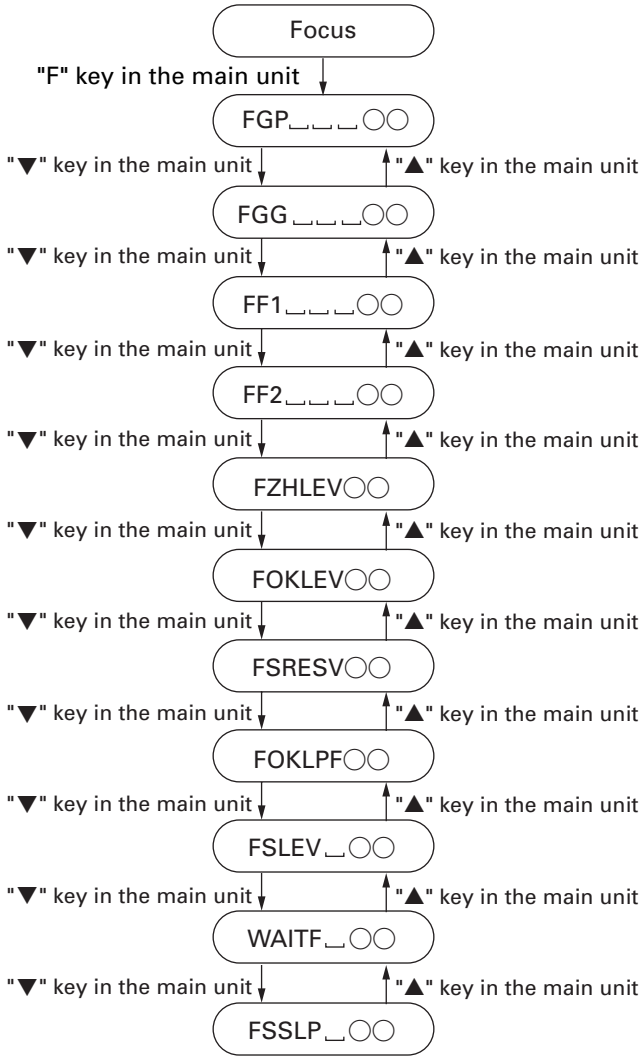
: Tracking setting menu

: Slide setting menu

: Spinning setting menu

* Pressing "SCR" key in the main unit in each status switches to "TEST STOP" .

● Setting focus



: Focus setting menu

: Setting value of the gain constant for focus based loop filter (PIT)
○○ : Setting value

: Setting value of the gain constant for focus based loop filter (GRV)
○○ : Setting value

: The first setting value of the number specifying f for focus based loop filter
○○ : Setting value

: The second setting value of the number specifying f for focus based loop filter
○○ : Setting value

: Setting value of the hysteresis level to be detected in FZC
○○ : Setting value

: Setting value of the hysteresis level to be detected in FOK
○○ : Setting value

: Reserve for focus control
○○ : Setting value

: Setting value of LPF factor during FOK generation
○○ : Setting value

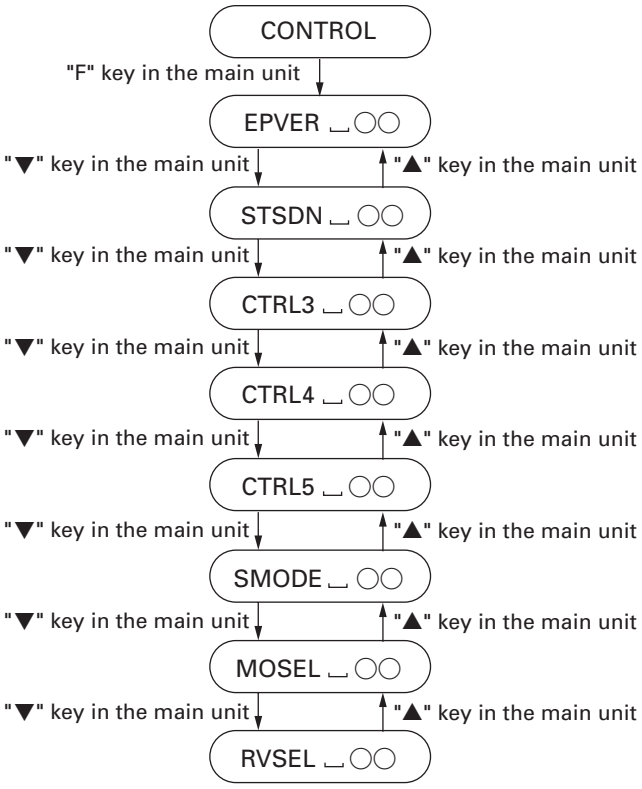
: Amplitude of focus search
○○ : Setting value

: Setting value of wait time during feeding with auto focus
○○ : Setting value

: Slope of focus search
○○ : Setting value

* Pressing "SCR" key in the main unit in each status switches to "TEST STOP" .
* Pressing RIGHT/LEFT key in each status switches the setting value in the range from 00_H through FF_H.
(Upper limits depend on items.)

● Setting control



: Control setting menu

: EEPROM version
○○ : Setting value

: The number of accumulated sectors when voice starts.
○○ : Setting value

: Setting value 3 for controlling
○○ : Setting value

: Setting value 4 for controlling
○○ : Setting value

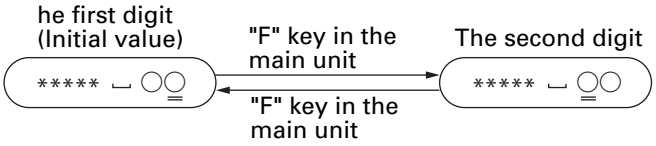
: Setting value 5 for control
○○ : Setting value

: Special mode select data
○○ : Setting value

: Monitor select data
○○ : Setting value

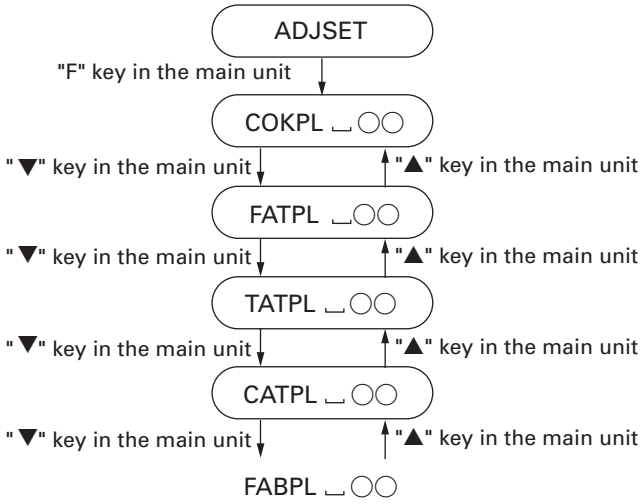
: Setting data related to controlling and others
○○ : Setting value

* Pressing "SCR" key in the main unit in each status switches to "TEST STOP" .
* Pressing "F" key in the main unit in each status where a setting value is displayed changes the digit of the setting value that will be changed.



* Pressing RIGHT/LEFT key in each status where a setting value is displayed changes the value in the digit you selected in the range from 0_H through F_H.

● Tuning setting


ADJSET
"F" key in the main unit
COKPL ␣ ○○
"▼" key in the main unit
"▲" key in the main unit
FATPL ␣ ○○
"▼" key in the main unit
"▲" key in the main unit
TATPL ␣ ○○
"▼" key in the main unit
"▲" key in the main unit
CATPL ␣ ○○
"▼" key in the main unit
"▲" key in the main unit
FABPL ␣ ○○

: Environment setting menu

: Reference value of COUT level for tuning
○○ : Setting value

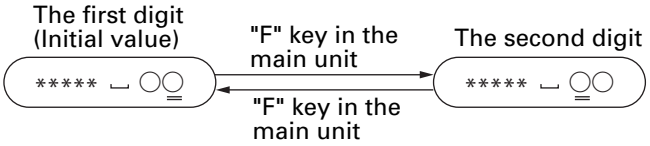
: Focus ATT reference value
○○ : Setting value

: Tracking ATT reference value
○○ : Setting value

: TCRS ATT reference value
○○ : Setting value

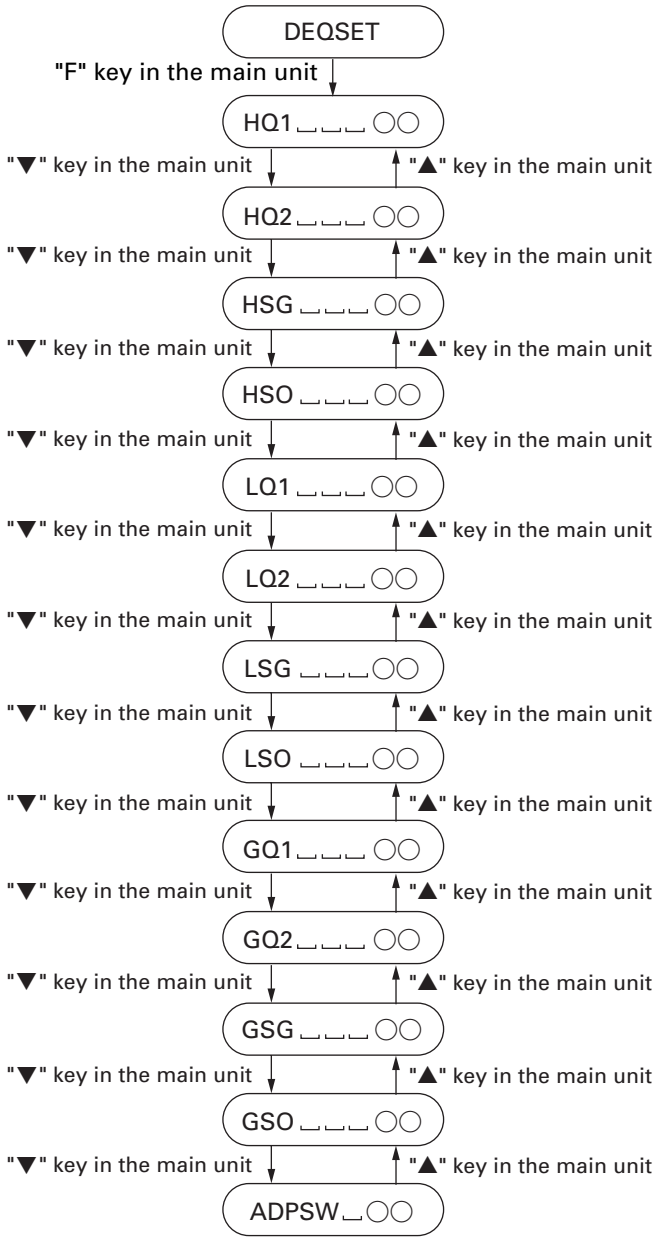
: Focus balance factor
○○ : Setting value

* Pressing "SCR" key in the main unit in each status switches to "TEST STOP" .
* Pressing "F" key in the main unit in each status where a setting value is displayed changes the digit of the setting value that will be changed.



* Pressing RIGHT/LEFT key in each status where a setting value is displayed changes the value in the digit you selected in the range from 0H through FH.

● Setting digital EQ



: Digital EQ setting menu

: Digital EQ tap factor A, D for high reflection pit part
○○ : Setting value

: Digital EQ tap factor B, C for high reflection pit part
○○ : Setting value

: Gain of auto level slicer for high reflection pit part
○○ : Setting value

: Slice level offset of auto level slicer for high reflection pit part
○○ : Setting value

: Digital EQ tap factor A, D for low reflection pit part
○○ : Setting value

: Digital EQ tap factor B, C for low reflection pit part
○○ : Setting value

: Gain of auto level slicer for low reflection pit part
○○ : Setting value

: Slice level offset of auto level slicer for low reflection pit part
○○ : Setting value

: Digital EQ tap factor A, D for low reflection groove part
○○ : Setting value

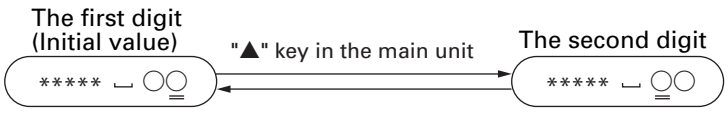
: Digital EQ tap factor B, C for low reflection groove part
○○ : Setting value

: Gain of auto level slicer for low reflection groove part
○○ : Setting value

: Slice level offset of auto level slicer for low reflection groove part
○○ : Setting value

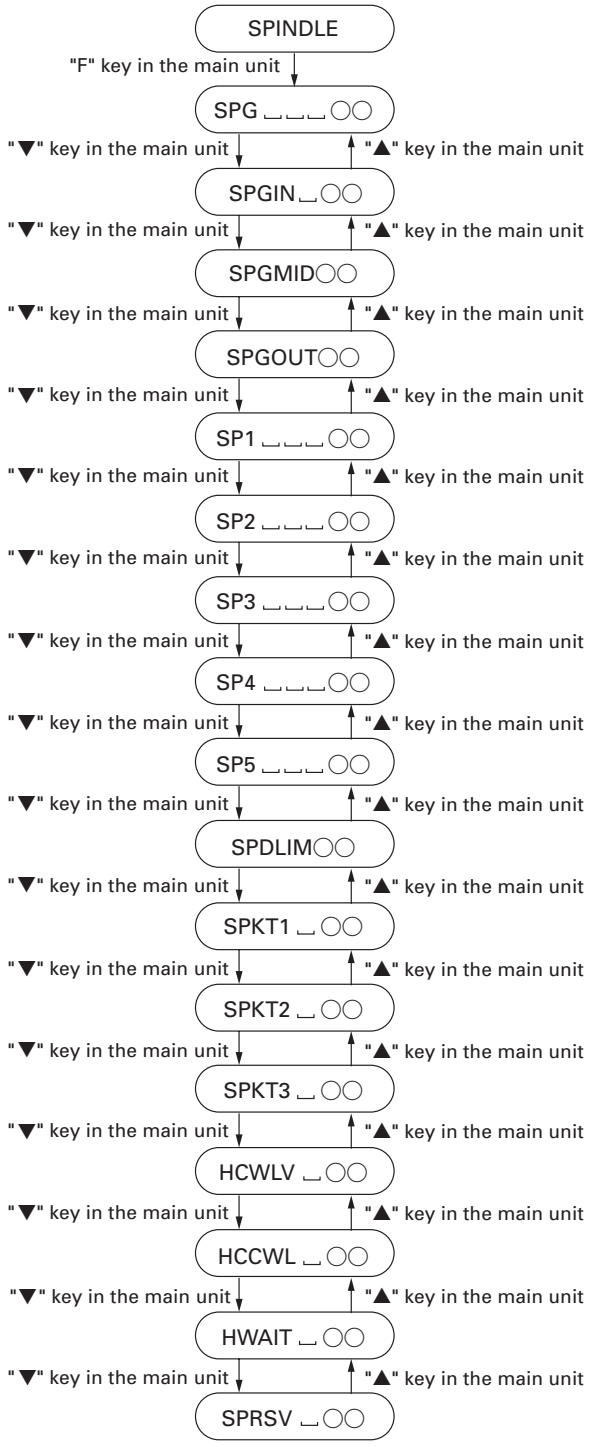
: Reverse switch of servo AD input
○○ : Setting value

* Pressing "SCR" key in the main unit in each status switches to "TEST STOP" .
* Pressing "F" key in the main unit in each status where a setting value is displayed changes the digit of the setting value that will be changed.



* Pressing RIGHT/LEFT key in each status where a setting value is displayed changes the value in the digit you selected in the range from 0_H through F_H.

● Setting spinning



: Spinning setting menu

: Setting value of the gain constant for spin based loop filter
○○ : Setting value

: Setting value of the gain constant for spin based loop filter (Inner circumference)
○○ : Setting value

: Setting value of the gain constant for spin based loop filter (Mid circumference)
○○ : Setting value

: Setting value of the gain constant for spin based loop filter (Outer circumference)
○○ : Setting value

: The first setting value of the number specifying f for spin based loop filter
○○ : Setting value

: The second setting value of the number specifying f for spin based loop filter
○○ : Setting value

: The third setting value of the number specifying f for spin based loop filter
○○ : Setting value

: The fourth setting value of the number specifying f for spin based loop filter
○○ : Setting value

: The fifth setting value of the number specifying f for spin based loop filter
○○ : Setting value

: Limiter setting value of spin drive PWM duty
○○ : Setting value

: Initial kick level of spinning (duration)
○○ : Setting value

: Rotation kick level of spinning (time)
○○ : Setting value

: Interval between spinning and resuming
○○ : Setting value

: Level to determine high speed forward rotation
○○ : Setting value

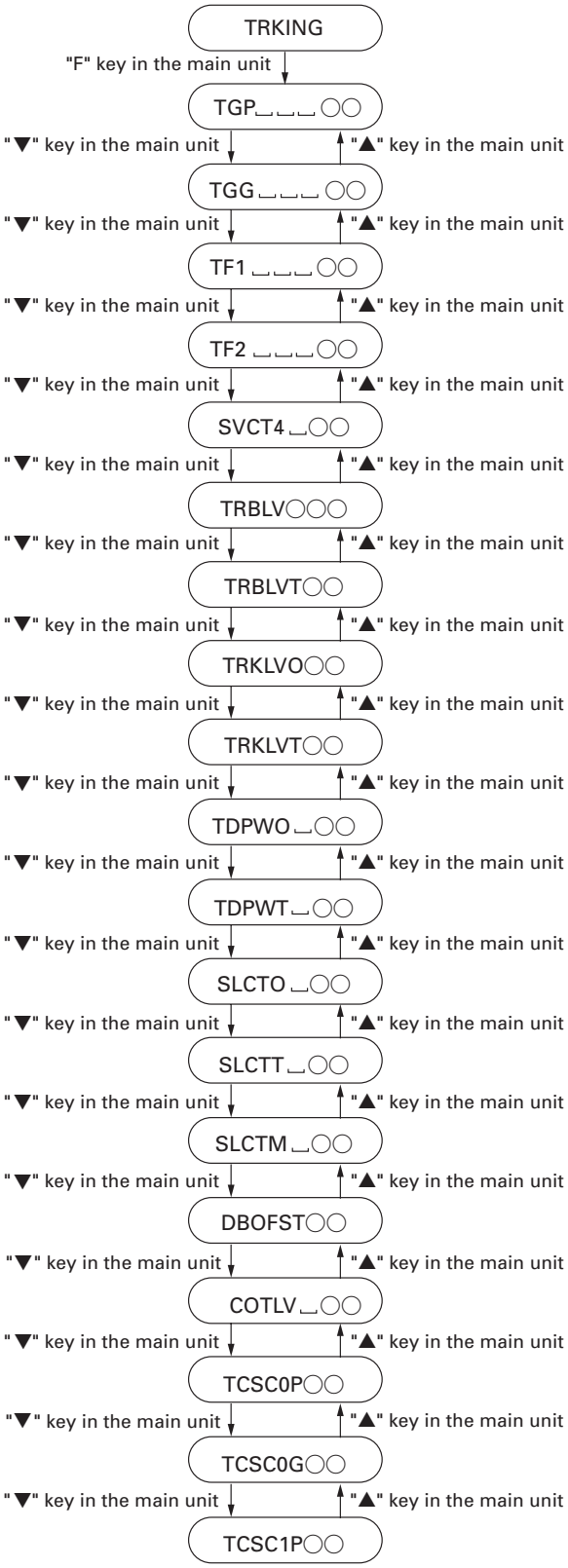
: Level to determine high speed backward rotation
○○ : Setting value

: KICK wait during high speed rotation
○○ : Setting value

: Reserve for spindle controlling
○○ : Setting value

* Pressing "SCR" key in the main unit in each status switches to "TEST STOP" .
* Pressing RIGHT/LEFT key in each status where a setting value is displayed changes the value in the digit you selected in the range from 0H through FH.
(Upper limits depend on items.)

● Setting tracking



: Tracking setting menu

: Setting value of the gain constant for tracking based loop filter (PIT)
○○ : Setting value

: Setting value of the gain constant for tracking based loop filter (GRV)
○○ : Setting value

: The first setting value of the number specifying f for spin based loop filter
○○ : Setting value

: The second setting value of the number specifying f for spin based loop filter
○○ : Setting value

: Tracking filter switch
○○ : Setting value

: Break level setting for jumping over one truck
○○ : Setting value

: Break level setting for jumping over ten trucks
○○ : Setting value

: Kick pulse level setting for jumping over one truck
○○ : Setting value

: Kick pulse level setting for jumping over ten trucks
○○ : Setting value

: Drive pulse width time setting for jumping over one truck
○○ : Setting value

: Drive pulse width time setting for jumping over ten trucks
○○ : Setting value

: Nonslid time setting for jumping over one truck
○○ : Setting value

: Nonslid time setting for jumping over ten trucks
○○ : Setting value

: Move nonslid time setting
○○ : Setting value

: PWM output offset setting
○○ : Setting value

: Comparison level setting value during COUT generation
○○ : Setting value

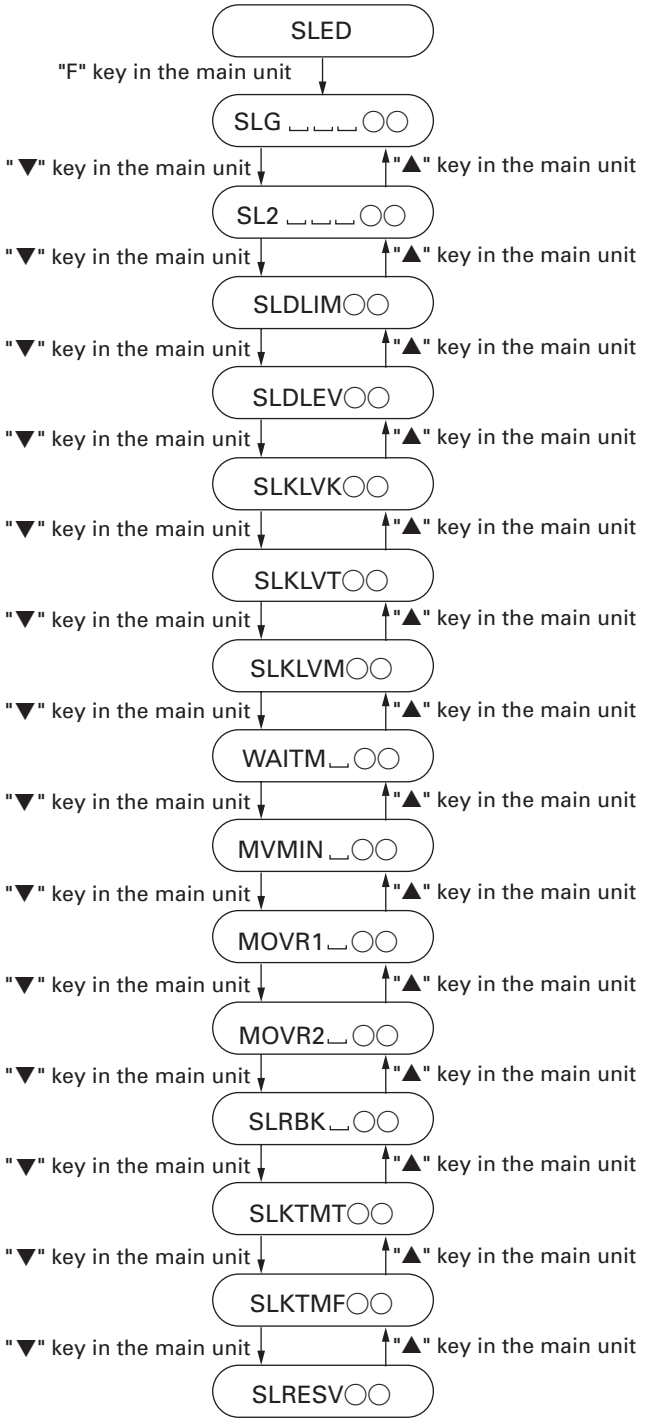
: TCRSC0 level setting (pit part)
○○ : Setting value

: TCRSC0 level setting (groove part)
○○ : Setting value

: TCRSC1 level setting (pit part)
○○ : Setting value

* Pressing "SCR" key in the main unit in each status switches to "TEST STOP" .
* Pressing RIGHT/LEFT key in each status where a setting value is displayed changes the value in the digit you selected in the range from 00_H through FF_H.
(Upper limits depend on items.)

● Setting slide



: Slide setting menu

: Thread gain constant
○○ : Setting value

: Slide filter factor 2
○○ : Setting value

: Slide output limiter
○○ : Setting value

: Slide output dead zone
○○ : Setting value

: Kick level during compelled slide move
○○ : Setting value

: Kick level for jumping over ten trucks
○○ : Setting value

: Kick level during move
○○ : Setting value

: Feed wait time after move
○○ : Setting value

: Minimum number of move trucks to be started
○○ : Setting value

: Move overrun table 1
○○ : Setting value

: Move overrun table 2
○○ : Setting value

: Break setting during feeding through inner circumference
○○ : Setting value

: Supplementary feeding time for jumping over ten trucks
○○ : Setting value

: PIT GRV feeding time
○○ : Setting value

: Thread control reserve
○○ : Setting value

* Pressing "SCR" key in the main unit in each status switches to "TEST STOP" .
* Pressing RIGHT/LEFT key in each status where a setting value is displayed changes the value in the digit you selected in the range from 00_H through FF_H.
(Upper limits depend on items.)

7.1.2 DISASSEMBLY

● Removing the Case Unit(not shown)

1. Remove the two screws.
2. Insert and turn a flat screwdriver to remove the case unit.

● Removing the Detach Grille Assy

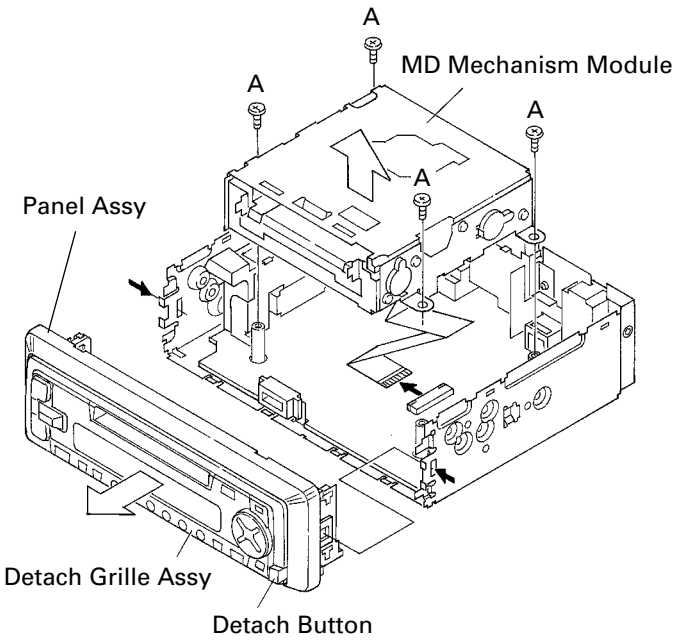
1. Press the detach button, and then remove the detach grille assy.

● Removing the Panel Assy

1. Disconnect the two stoppers, and then remove the panel assy.

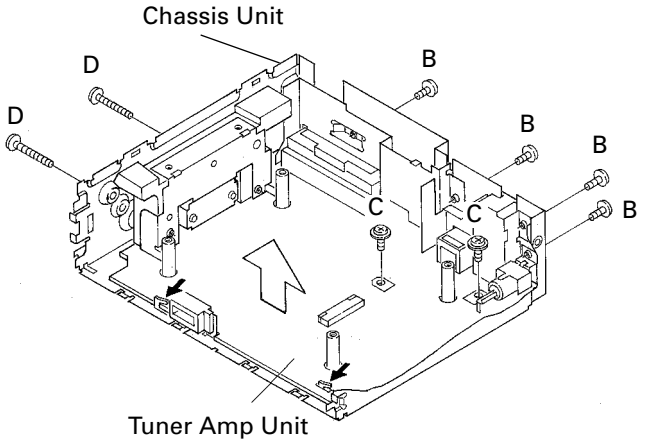
● Removing the MD Mechanism Module

1. Remove the four screws A.
2. Disconnect the connector indicated by arrow.
3. Remove the MD Mechanism Module.



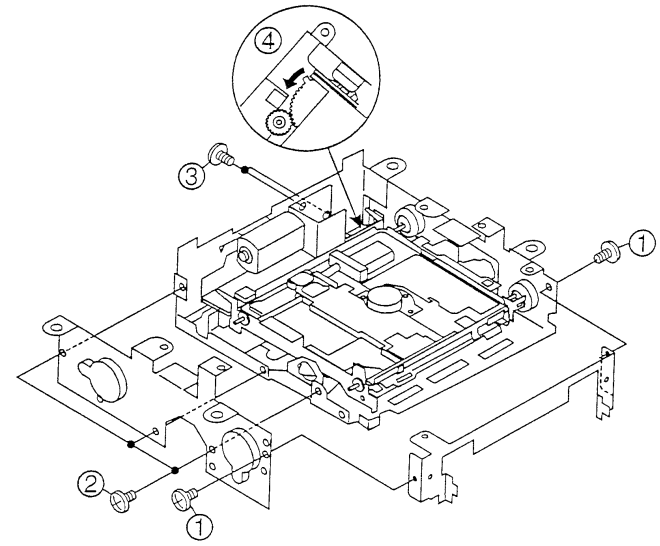
● Removing the Tuner Amp Unit

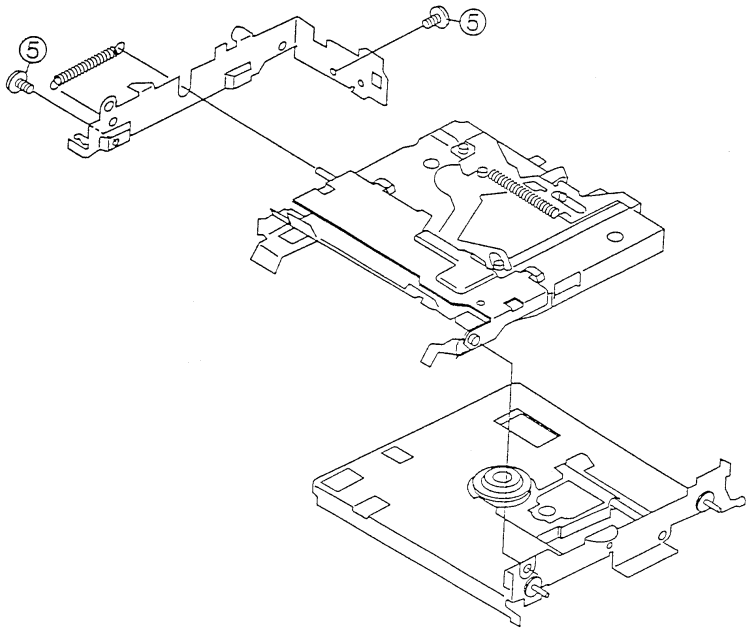
1. Remove the four screws B, two screws C and two screws D
2. Unbend the tabs at two locations indicated by arrows.
3. Remove the Tuner Amp Unit.



● Removing the MD Mechanism

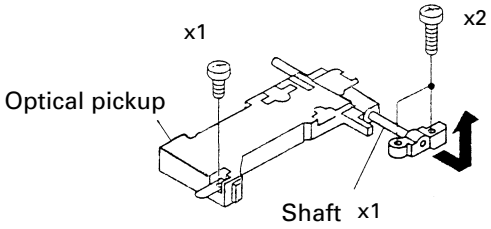
1. Remove No.3 screws and remove the loading motor.
2. Rotate No.4 gear in the direction indicated by the arrow.
3. Remove the No.1 screws , No.2 screw and then No.5 screws and take out the mechanism.





● How to remove optical pickup

1. Release the three screws.
2. Pull one shaft out a little to the slide motor side and lift the optical pickup upward slowly.

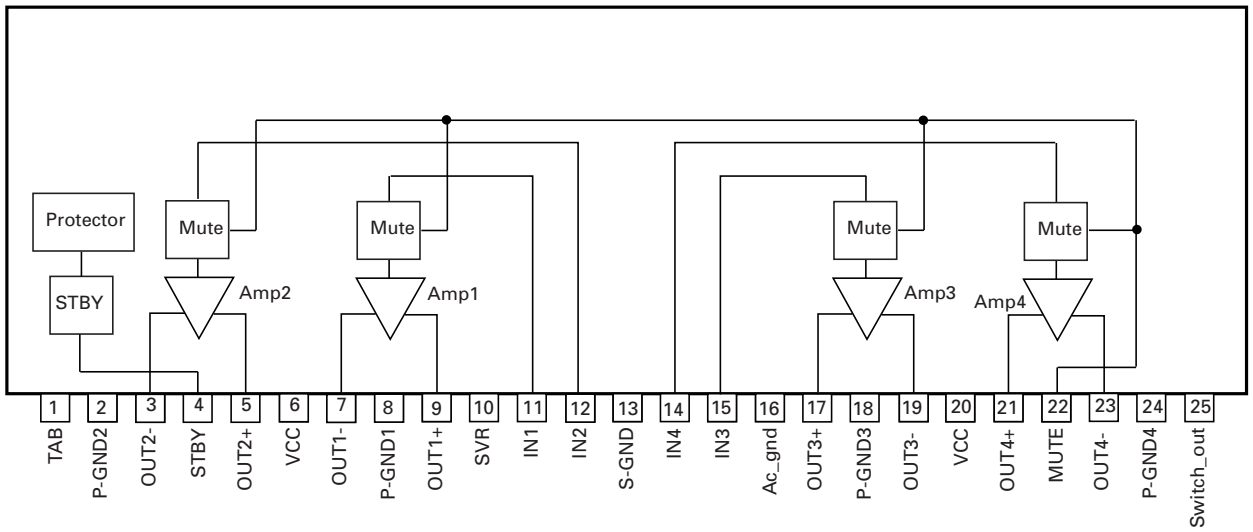


7.2 PARTS

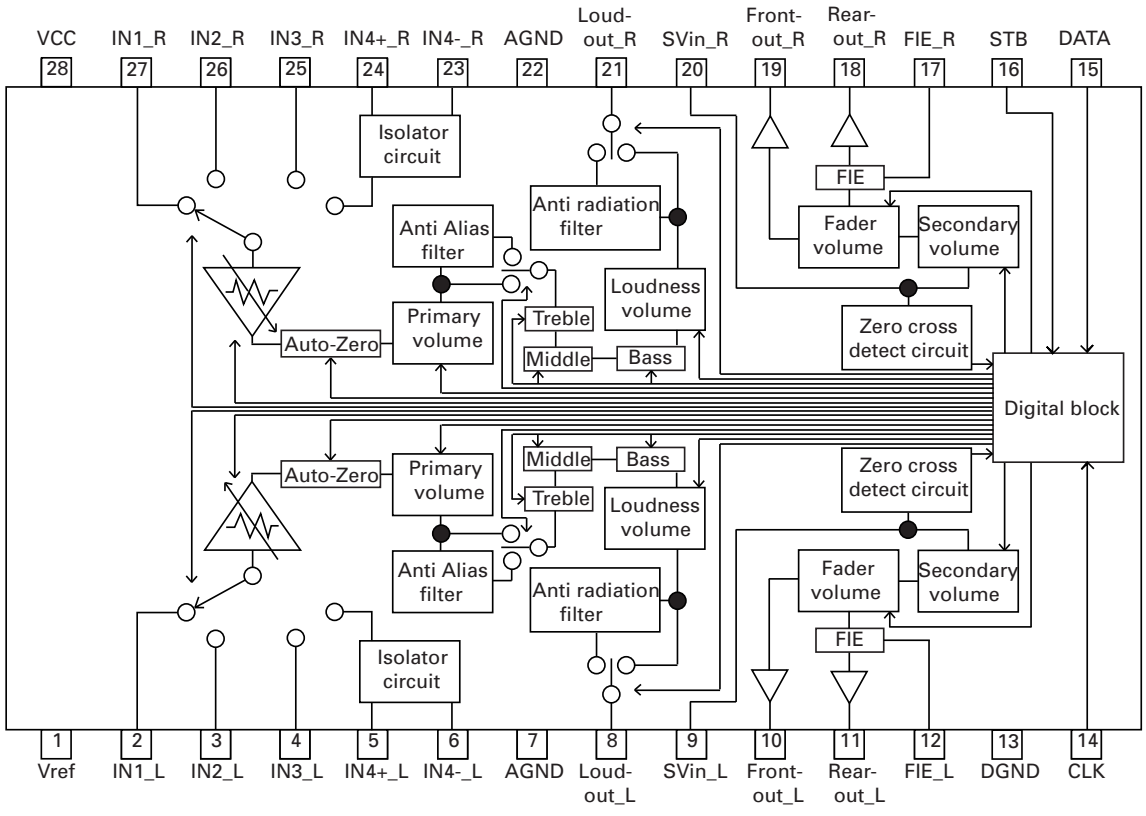
7.2.1 IC

PAL005A	BA5985FM	TC74VHC125FT
PD4960B	1245730345	NJM2904V
PD4959A	1245730449	
PD6277A	1245730502	
LC75874W	1245730310	
PML003AM	TC7SH08F	

PAL005A



PML003AM

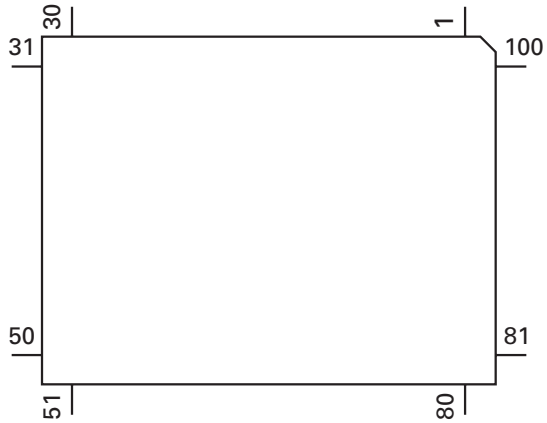


● **Pin Functions (PD4960B)**

Pin No.	Pin Name	I/O	Function and Operation
1	SWVDD	O	Keyboard unit power supply control output
2	$\overline{\text{DSENS}}$	I	Grille detach sense input
3	NC		Not used
4	$\overline{\text{ISENS}}$	I	Illumination power supply sence input
5	TESTIN	I	Test program mode input
6	$\overline{\text{DRST}}$	O	RDS decoder reset output
7	NC		Not used
8	$\overline{\text{SK}}$	I	SK signal input
9,10	NC		Not used
11	$\overline{\text{RESET}}$	I	Reset input
12	XT2		Not used
13	XT1		Not used
14	VSS		GND
15	X2		Crystal oscillator connection pin
16	X1		Crystal oscillator connection pin
17	REGOFF		Not used
18	REGC		Not used
19	VDD		Power supply
20	ILMPW	O	Illumination power supply control output
21	SYSPWR	O	System power control output
22	$\overline{\text{ADPW}}$	O	A/D converter power supply control output
23	LCDPW	O	LCD back light power supply control output
24	IPPW	O	Power supply control output for IP BUS interface IC
25	ASENBO	O	Slave power supply control output
26	AMPW	O	AM power supply control output
27	TELIN	I	Telephone mute input
28	$\overline{\text{MUTE}}$	O	System mute output
29	DIM	O	Dimmer select output
30	FMPW	O	FM power supply control output
31,32	NC		Not used
33	VCK	O	Clock output for electronic volume
34	VST	O	Strobe pulse output for electronic volume
35	VDT	O	Data output for electronic volume
36	$\overline{\text{TMUTE}}$	O	Tuner mute output
37	DRELAY	O	External relay output
38	SD	I	Station detector input
39	$\overline{\text{ST}}$	I	FM stereo input
40	VSS		GND
41	VDD		Power supply
42	$\overline{\text{MDSENS}}$	I	RDS modulation detect input
43	NC		Not used
44	$\overline{\text{RDSLK}}$	I	RDS LK signal input
45	$\overline{\text{CURRQ}}$	O	RDS tuning voltage FIX output
46	RDT	I	RDS Fdata input
47	NC		Not used
48	DRSENS	I	Door open/close sense input
49	DRSYS	O	Door system select output
50	DLED	O	Alarm LED output
51	DALMON	O	DFS alarm output
52–61	NC		Not used
62	PCL	O	Clock adjustment output
63	$\overline{\text{BRXEN}}$	I/O	P-BUS reception enable input/output
64	$\overline{\text{BSRQ}}$	I	P-BUS service request output pin
65	BSCK	I/O	P-BUS serial clock input/output
66	BSI	I	P–BUS serial data input
67	BSO	O	P–BUS serial data output
68	$\overline{\text{BRST}}$	I	P–BUS reset input

Pin No.	Pin Name	I/O	Function and Operation
69–72	NC		Not used
73	TEST	I	Test terminal
74	SL	I	Signal level input from tuner
75	MODEL	I	Model select input
76	CL	I	Synchronizing signal input of display data latch
77	NL	I	RDS noise level input
78–81	NC		Not used
82	AVDD		A/D converter power supply
83	AVREF1		A/D converter reference voltage
84	GND		A/D converter GND
85	RX	I	IP BUS data input
86	TX	O	IP BUS data output
87	GND		GND
88	$\overline{\text{LDET}}$	I	RDS PLL lock sense input
89	$\overline{\text{RCK}}$	I	RDS demodulation clock input
90	RDS57K	I	RDS 57kHzBP-OUT sense input
91	GND		GND
92	$\overline{\text{ASENS}}$	I	ACC power sense input
93	$\overline{\text{BSENS}}$	I	Back up power sense input
94	TUNPDI	I	PLL IC data input
95	KYDT	I	Key data input
96	DPDT	O	Display data output
97	TUNPCK	O	Serial clock output for PLL IC
98	TUNPDO	O	Data output for PLL IC
99	TUNPCE	O	Chip enable output for PLL IC
100	PEE	O	Beep tone output

*PD4960B



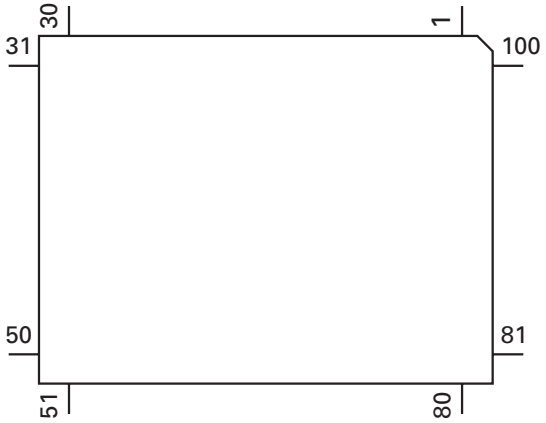
IC's marked by* are MOS type.
Be careful in handling them because they are very liable to be damaged by electrostatic induction.

● **Pin Functions (PD4959A)**

Pin No.	Pin Name	I/O	Function and Operation
1	SWVDD	O	Keyboard unit power supply control output
2	$\overline{\text{DSENS}}$	I	Grille detach sense input
3	NC		Not used
4	$\overline{\text{ISENS}}$	I	Illumination power supply sence input
5	TESTIN	I	Test program mode input
6-10	NC		Not used
11	$\overline{\text{RESET}}$	I	Reset input
12	XT2		Not used
13	XT1		Not used
14	VSS		GND
15	X2		Crystal oscillator connection pin
16	X1		Crystal oscillator connection pin
17	REGOFF		Not used
18	REGC		Not used
19	VDD		Power supply
20	ILMPW	O	Illumination power supply control output
21	SYSPWR	O	System power control output
22	$\overline{\text{ADPW}}$	O	A/D converter power supply control output
23	LCDPW	O	LCD back light power supply control output
24	IPPW	O	Power supply control output for IP BUS interface IC
25	ASENBO	O	Slave power supply control output
26	AMPW	O	AM power supply control output
27	TELIN	I	Telephone mute input
28	$\overline{\text{MUTE}}$	O	System mute output
29	DIM	O	Dimmer select output
30	FMPW	O	FM power supply control output
31,32	NC		Not used
33	VCK	O	Clock output for electronic volume
34	VST	O	Strobe pulse output for electronic volume
35	VDT	O	Data output for electronic volume
36	NC		Not used
37	DRELAY	O	External relay output
38	SD	I	Station detector input
39	$\overline{\text{ST}}$	I	FM stereo input
40	VSS		GND
41	VDD		Power supply
42	NC		Not used
43	NC		Not used
44-46	NC		Not used
47	NC		Not used
48	DRSENS	I	Door open/close sense input
49	DRSYS	O	Door system select output
50	DLED	O	Alarm LED output
51	DALMON	O	DFS alarm output
52–61	NC		Not used
62	PCL	O	Clock adjustment output
63	$\overline{\text{BRXEN}}$	I/O	P-BUS reception enable input/output
64	$\overline{\text{BSRQ}}$	I	P-BUS service request output pin
65	BSCK	I/O	P-BUS serial clock input/output
66	BSI	I	P–BUS serial data input
67	BSO	O	P–BUS serial data output
68	$\overline{\text{BRST}}$	I	P–BUS reset input
Pin No.	Pin Name	I/O	Function and Operation
69–72	NC		Not used
73	TEST	I	Test terminal
74	SL	I	Signal level input from tuner
75	MODEL	I	Model select input

Pin No.	Pin Name	I/O	Function and Operation
76–81	NC		Not used
82	AVDD		A/D converter power supply
83	AVREF1		A/D converter reference voltage
84	GND		A/D converter GND
85	RX	I	IP BUS data input
86	TX	O	IP BUS data output
87	GND		GND
88-90	NC		Not used
91	GND		GND
92	$\overline{\text{ASENS}}$	I	ACC power sense input
93	$\overline{\text{BSENS}}$	I	Back up power sense input
94	TUNPDI	I	PLL IC data input
95	KYDT	I	Key data input
96	DPDT	O	Display data output
97	TUNPCK	O	Serial clock output for PLL IC
98	TUNPDO	O	Data output for PLL IC
99	TUNPCE	O	Chip enable output for PLL IC
100	PEE	O	Beep tone output

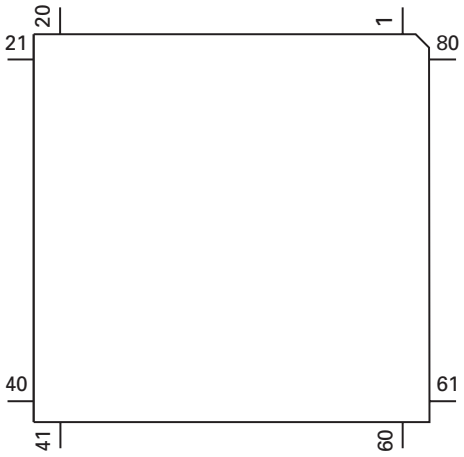
*PD4959A



● **Pin Functions (PD6277A)**

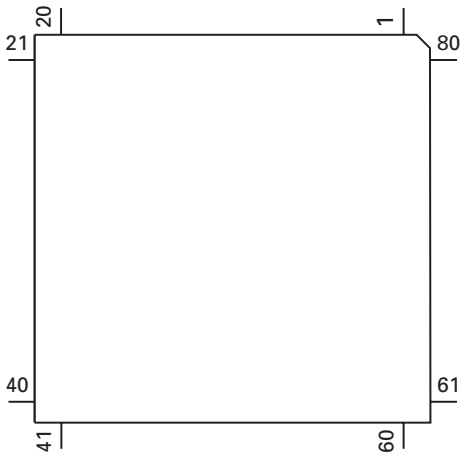
Pin No.	Pin Name	I/O	Format	Function and Operation
1	VSS			GND
2	X1			Crystal oscillator connection pin
3	X0			Crystal oscillator connection pin
4	$\overline{\text{RESET}}$	I		System reset input
5	MOD1	I		Operation mode appointment input
6	MOD0	I		Operation mode appointment input
7	LED	O	C	LED control output
8	S0	O	C	System micro computer UART communication data output
9	S1	I		System micro computer UART communication data input
10	REM	I		Remote control reception input
11	$\overline{\text{DIM}}$	O	C	Dimmer output
12	ILM	O	C	Illumination color select output
13–16	$\overline{\text{KD4}}$–$\overline{\text{KD1}}$	I		Key data input
17–22	$\overline{\text{KST6}}$–$\overline{1}$	O	C	Key strobe output
23	VCC			Power supply
24	$\overline{\text{INH}}$	O	N	LCD driver display inhibit output
25	CE	O	N	Chip enable output for display driver
26	CL	O	N	Synchronizing signal output for display driver
27	DI	O	N	Data output for display driver
28–73	SEG45-0	O	L	LCD segment output
74–77	COM3–0	O	L	LCD common output
78	V3			LCD drive power supply
79	V2			LCD bias power supply
80	V1			LCD bias power supply

*PD6277A



Format	Meaning
C	C MOS
N	N channel open drain
L	LCD C output

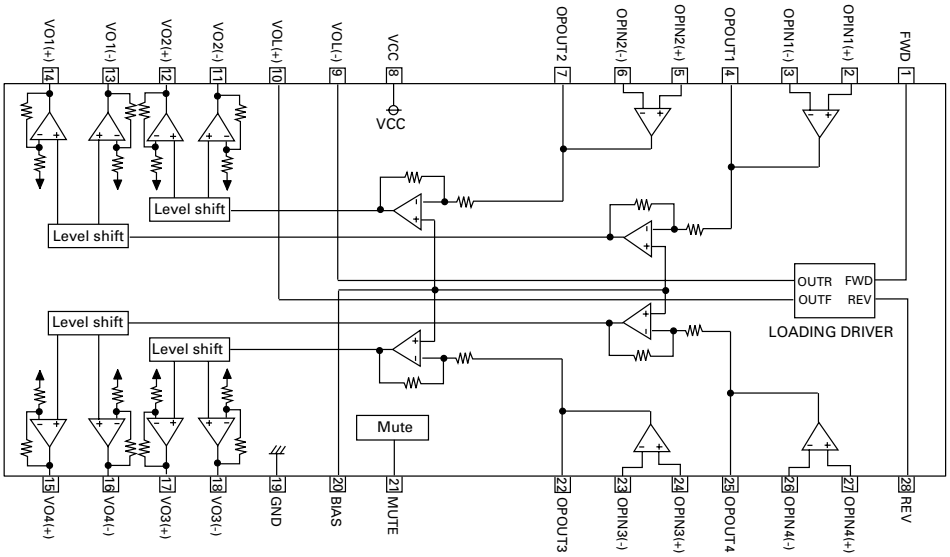
LC75874W



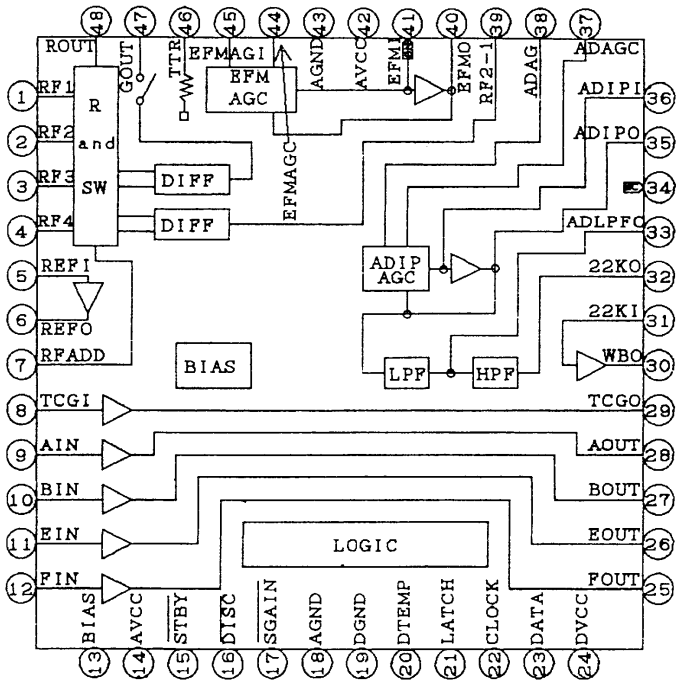
● Pin Functions (LC75874W)

Pin No.	Pin Name	I/O	Function and Operation
1–64	SE3-66	O	LCD segment signal output
65–68	CO1-CO4	O	LCD common signal output
69	VDD		Power supply
70	VLCD		LCD Power supply
71	VLCD1		LCD bias power supply
72	VLCD2		LCD bias power supply
73	VSS		GND
74	OSC	I/O	
75	$\overline{\text{LINH}}$	I	Inhibit input from IC901
76	CE	I	Chip enable output pin for LCD driver
77	CL	I	Clock output for LCD driver
78	DI	I	Data output for LCD driver
79,80	SE1,SE2	O	LCD segment signal

BA5985FM



*1245730345



● **Pin Functions (1245730345)**

Pin No.	Pin Name	I/O	Function and Operation
1-4	RF1-4	I	RF signal input terminals 1-4 Input RF signal output from pickup
5	REFI	I	Reference voltage amplifier input
6	REFO	O	Reference voltage amplifier output
7	RFADD	O	Terminal outputting added resistance of RF 1-4
8	TCGI	I	Terminal amplified inputting track cross detected signal at groove
9	AIN	I	Inverted input terminal of signal amplifier for the servo (Focus servo based)
10	BIN	I	Inverted input terminal of signal amplifier for the servo (Focus servo based)
11	EIN	I	Inverted input terminal of signal amplifier for the servo (Tracking servo based)
12	FIN	I	Inverted input terminal of signal amplifier for the servo (Tracking servo based)
13	BIAS	I	Bias input
14	AVCC		Analog power supply
15	XSTBY	O	Logic signal outputting terminal (Outputs inverted STBY signal)
16	XDISC	O	Logic signal outputting terminal (Outputs inverted DISC signal)
17	XGAIN	O	Logic signal outputting terminal (Outputs inverted SGAIN signal)
18	AGND		Analog GND
19	DGND		Digital GND
20	DTEMP	I	Chip temperature detection
21	LATCH	I	Latch signal input
22	CLOCK	I	Clock signal input
23	DATA	I	Serial data input
24	DVCC		Digital GND
25	FOUT	O	Output terminal of signal amplifier for the servo (Tracking servo based)
26	EOUT	O	Output terminal of signal amplifier for the servo (Tracking servo based)
27	BOPUT	O	Output terminal of signal amplifier for the servo (Focus servo based)
28	AOUT	O	Output terminal of signal amplifier for the servo (Focus servo based)
29	TCGO	O	Terminal amplified inputting tracking cross detected signal at groove
30	WBO	O	Converter output terminal for ADIP signal binarization
31	22KI	I	Converter input terminal for ADIP signal trinarization
32	22KO	O	ADIP signal HPF amplifier output
33	ADLPFO	O	ADIP signal LPF amplifier output
34	NC		Not used
35	ADIPO	O	ADIP signal pre-amplifier output
36	ADIPI	O	ADIP signal AGC amplifier output
37	ADAGC		ADIP signal AGC smoothing capacitor connection pin
38	ADAGI	I	ADIP signal AGC amplifier input
39	RF2-1		Differential signal of RF1 and RF2
40	EFMO	O	RF signal pre-amplifier output
41	EFMI	O	RF signal AGC amplifier output
42	AVCC		Analog power supply
43	AGND		Analog GND
44	EFMAGC		EFM signal AGC smoothing capacitor connection pin
45	EFMAGI	I	EFM signal AGC amplifier input
46	ATTR		47and 48 pin output signal attenuation terminal
47	GOUT	O	Outputs RF1+RF2+RF3–RF4 signal at groove
48	ROUT	O	Outputs added resistance of RF1-4 at PIT

● **Pin Functions (1245730449)**

Pin No.	Pin Name	I/O	Function and Operation
1	EFMMON	O	EFM monitor output
2	AVCC		Analog power supply
3	EFMI	I	EFM signal input from RF AMP
4	AGND		Analog GND
5	AIN	I	Focus error signal A
6	EIN	I	Tracking error signal E
7	TCG	I	Tracking cross signal
8	BIN	I	Focus error signal B
9	FIN	I	Tracking error signal F
10	VBAT	I	Power supply voltage detection signal for constant voltage servo
11	WBI	I	ADIP wobble signal
12	VDD1		Digital power supply
13	DGND		Digital GND
14,15	TEST0,1	I	Test input normality : GND
16	TEST2	I	Test input en-deco/servo mode, ATRAC mode select normality : GND
17	X176KO	O	Clock output f=176.4KHz (4fs)
18	FODRF	O	Focus servo forward output PWM
19	FODRR	O	Focus servo reverse output PWM
20	TRDRF	O	Tracking servo forward output PWM
21	TRDRR	O	Tracking servo reverse output PWM
22	SLDRF	O	Slide servo forward output PWM
23	SLDRR	O	Slide servo reverse output PWM
24	SPDRF	O	Spindle servo forward output or spindle servo output PWM
25	SPDRR	O	Spindle servo reverse output or spindle rotary FWD/REV select
26-28	RAA3-1	O	Address output to external D-RAM ADR3-1
29	RAA0	O	Address output to external D-RAM ADR0 (LSB)
30	RAA10	O	Address output to external D-RAM ADR10 (MSB)
31	VDD2		D-RAM interface power supply
32-36	RAA4-8	O	Address output to external D-RAM ADR4-8
37	RA0EX	O	Data output enable signal to external D-RAM
38	DGND		Digital GND
39	RACASX	O	Column address strobe signal output to external D-RAM
40	RAD2	I/O	Data input/output with external D-RAM D2
41	RAD3	I/O	Data input/output with external D-RAM D3 (MSB)
42	RAA9	O	Address output to external D-RAM ADR9
43	RARASX	O	Row address strobe signal output to external D-RAM
44	RAWEX	O	Data write enable signal output to external D-RAM
45	RAD1	I/O	Data input/output with external D-RAM D1
46	RAD0	I/O	Data input/output with external D-RAM D0 (LSB)
47	TCRS	O	Track cross signal
48	ACRCER	O	ADIP CRC error flag monitor output
49	PLCK	O	EFM PLL clock output at playback
50	EFMO	O	Outputs EFM signal when recording Outputs C1F (C1 error flag) monitor when playbacking
51	X700KO	O	Clock output f=705.6KHz Dose not output clock when RSTX=0
52,53	EXPORT0,1	O	Microprocessor extended output port 0,1
54	TESO1	O	PLLLR Microprocessor extended output port 2 when switching
55	TEST3	I/O	PLLOSC Microprocessor extended output port 3 when switching
56	TEST4	I/O	EXTCLK Microprocessor extended output port 4 when switching
57	CDDATA	I/O	Inputs CD data for high speed dubbing Microprocessor extended output port 5 when switching
58	CDLRCK	I/O	Inputs CD LR clock for high speed dubbing Microprocessor extended output port 6 when switching
59	CDBCLK	I/O	Inputs CD bit clock for high speed dubbing Microprocessor extended output port 7 when switching
60	VXI	I	Inputs PLL clock for varipitch
61	VPO	O	Outputs PLL phase error for varipitch
62	VDD1		Digital power supply
63	DGND		Digital GND

Pin No.	Pin Name	I/O	Function and Operation
64	XI	I	Inputs oscillator 33.8688MHz
65	XO	O	Outputs oscillator 33.8688MHz
66	DIN	I	Digital input signal
67	DOUT	O	Digital output signal
68	VDD3		Internal PLL power supply
69	DGND		Digital GND
70	LRCK	O	Lch/Rch select output of audio data
71	BCLK	O	Shift clock of audio data
72	DFCK	O	AD/DA converter digital filter clock 256Fs
73	ADDATA	I	Audio data input
74	DADATA	O	Audio data output
75	FEMON	O	Focus error signal monitor output
76	TOTMON	O	Total signal monitor output
77	TEMON	O	Tracking error signal monitor output
78	SBCK	I	DIN subcode read clock EIAJ CP-309 format
79	SBO	O	DIN subcode read serial data EIAJ CP-309 format
80	SBSY	O	DIN subcode block synchronizing signal CP-309 format
81	SFSY	O	DIN subcode frame synchronizing signal CP-309 format
82	FOK	O	Focus OK detection signal "0" : Focus OK
83	SENSE	O	Servo condition detection signal "1": During pull in auto move, auto jump, auto focus
84	COUT	O	Track cross signal output
85	MCCK	O	Clock output for microcomputer Outputs clock when RSTX=0
86	DINTX	O	Interrupt request output to system control interface
87	VDD1		Digital power supply
88	DGND		Digital GND
89	RSTX	I	Chip reset input L : Reset
90-97	SYD0-7	I/O	System control interface data bus
98	SYWRX	I	System control interface register write pulse input
99	SYRDX	I	System control interface register read pulse input
100	SYRS	I	System control interface register select input

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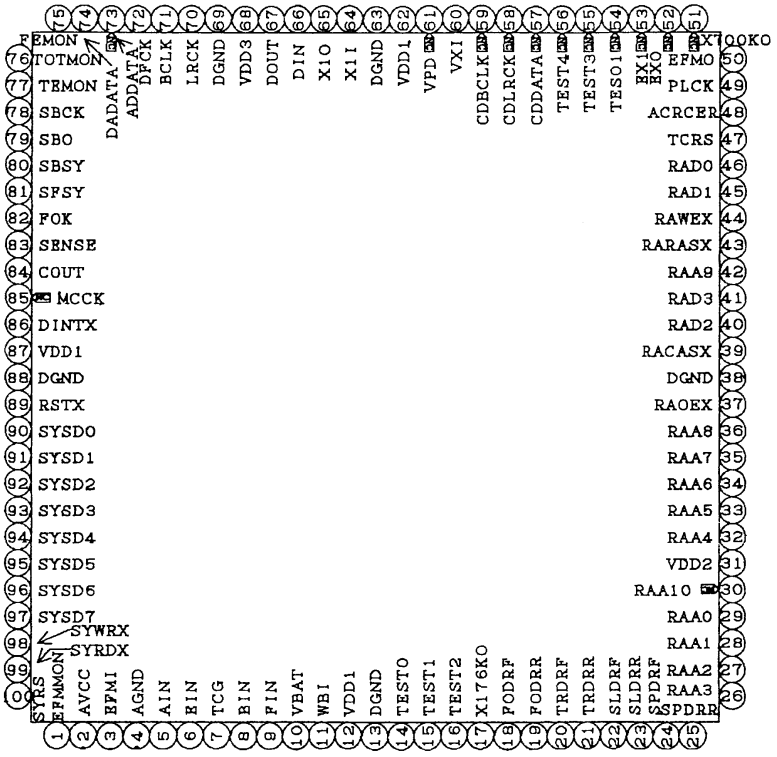

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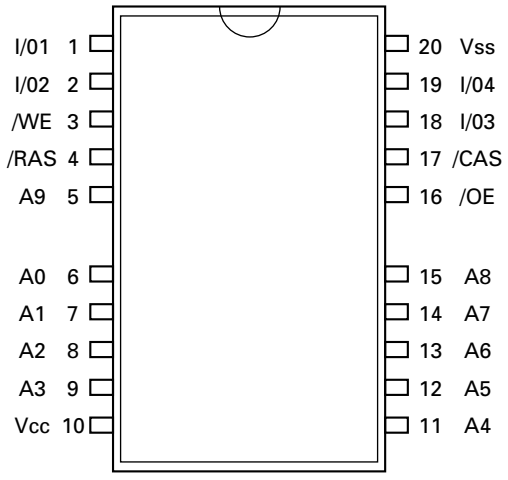

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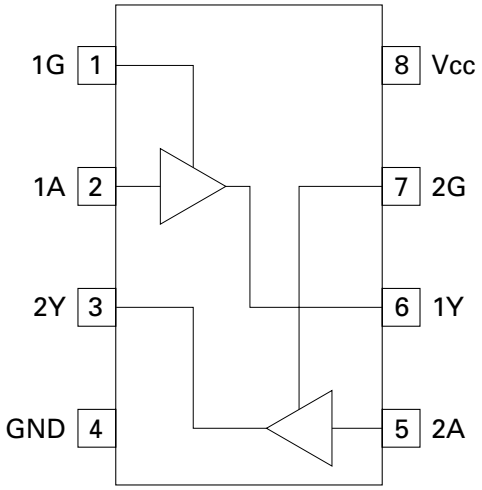
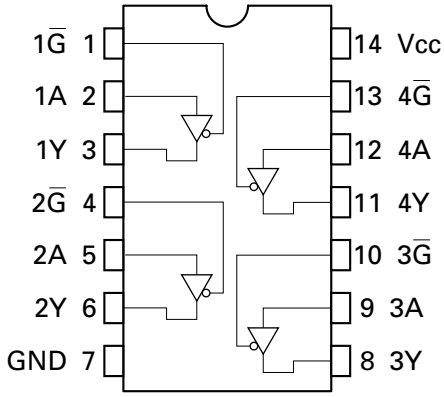
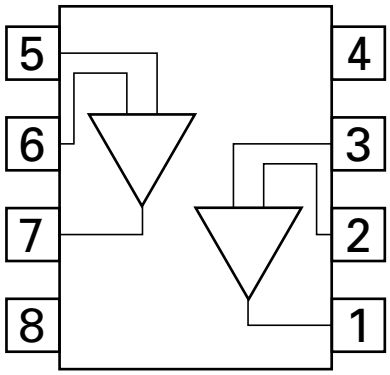


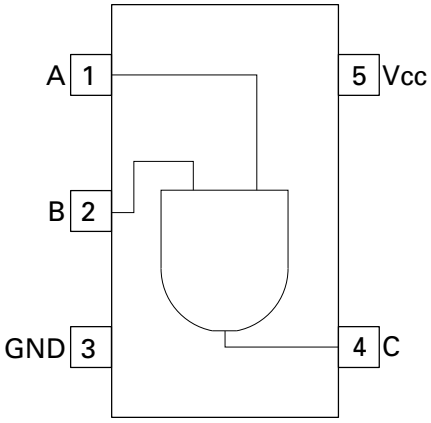
TC74VHC125FT



NJM2904V

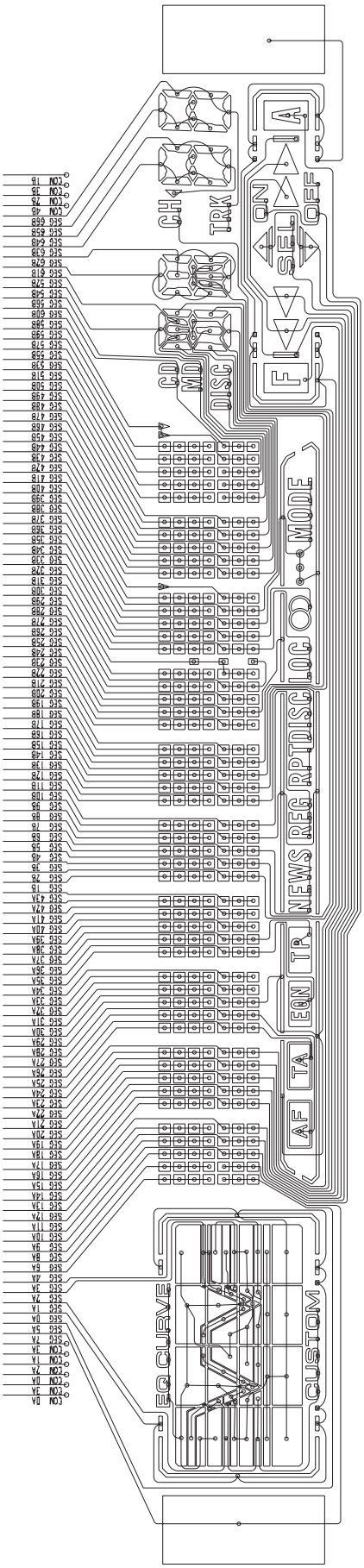


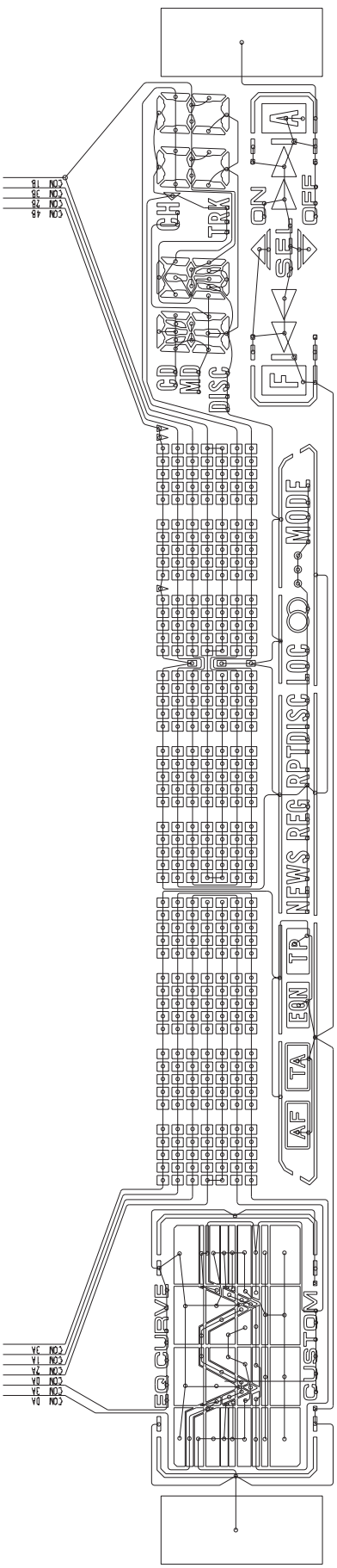
TC7SH08F



7.1.2 DISPLAY

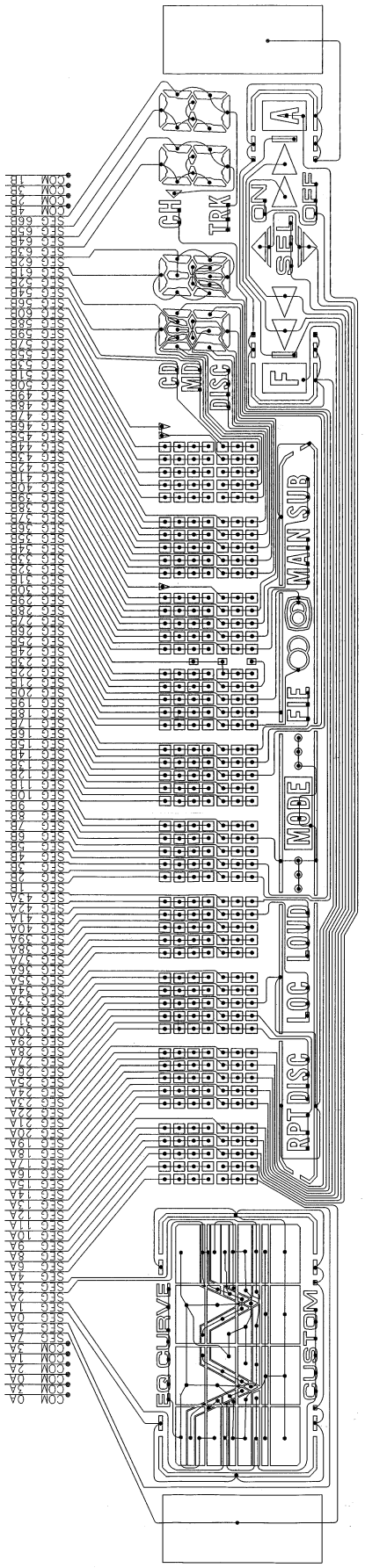
● **CAW1490(MEH-P5000RII/EW)**



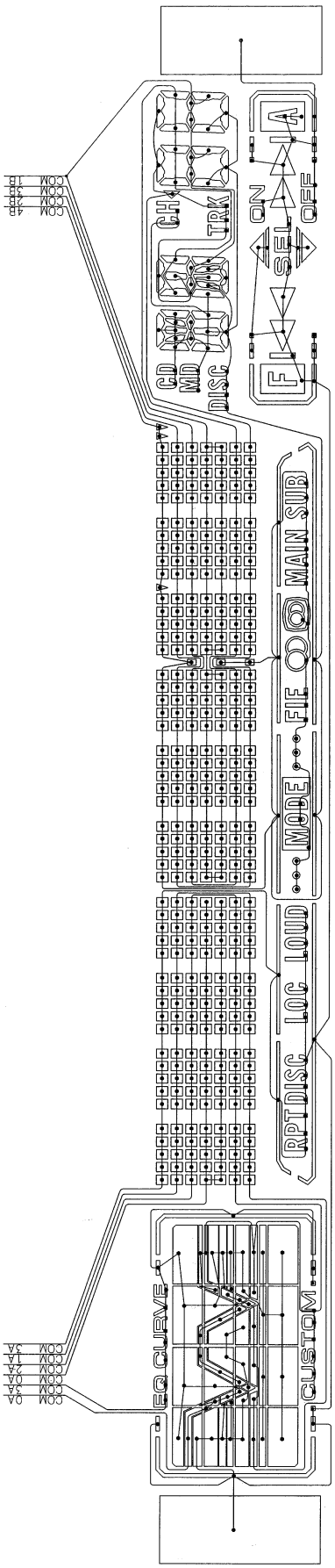


● **CAW1491(MEH-P5000/UC, MEH-P5050/ES)**

SEGMENT



COMMON

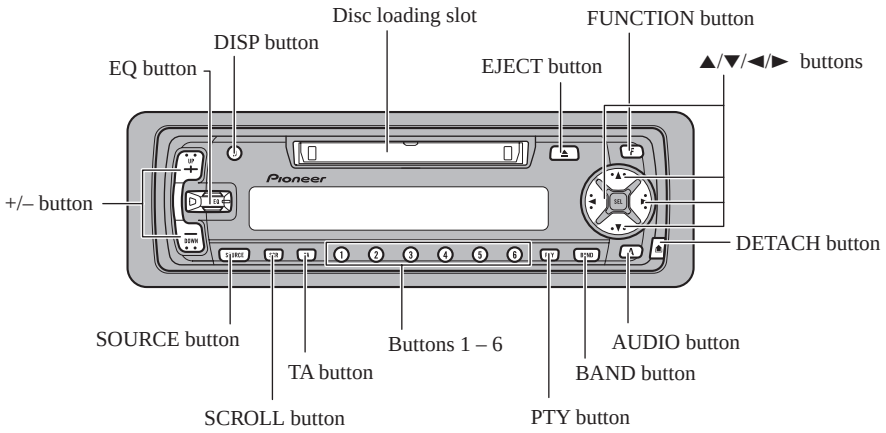


8. OPERATIONS AND SPECIFICATIONS

8.1 OPERATIONS

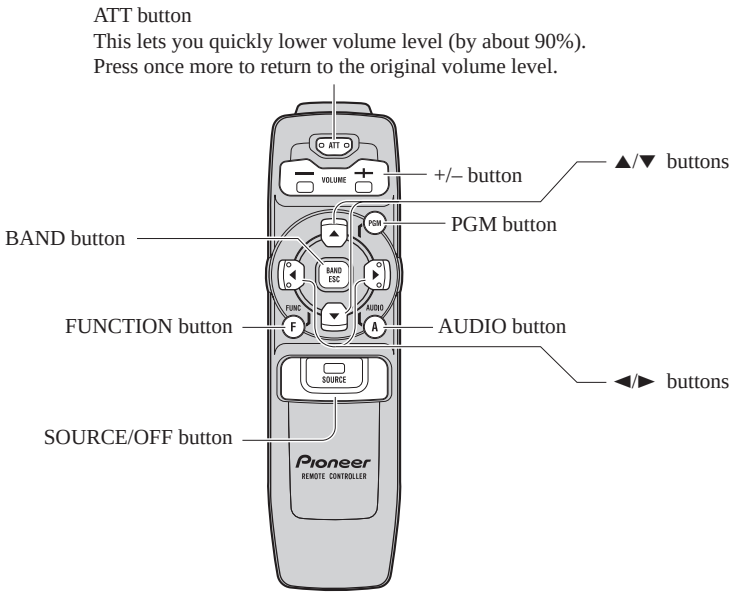
Key Finder

Head Unit(MEH-P5000RII/EW)



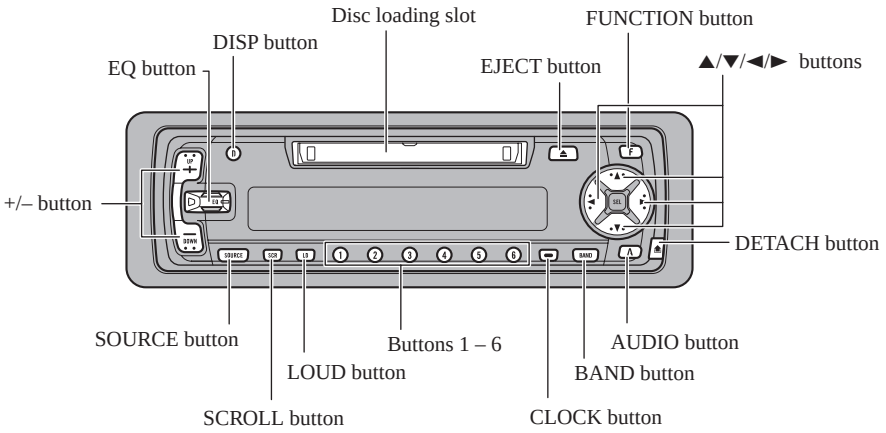
Remote Controller (CD-R600)

The remote controller (CD-R600) enabling remote control of the head unit is sold separately. Operation is the same as when using buttons on the head unit.



Key Finder

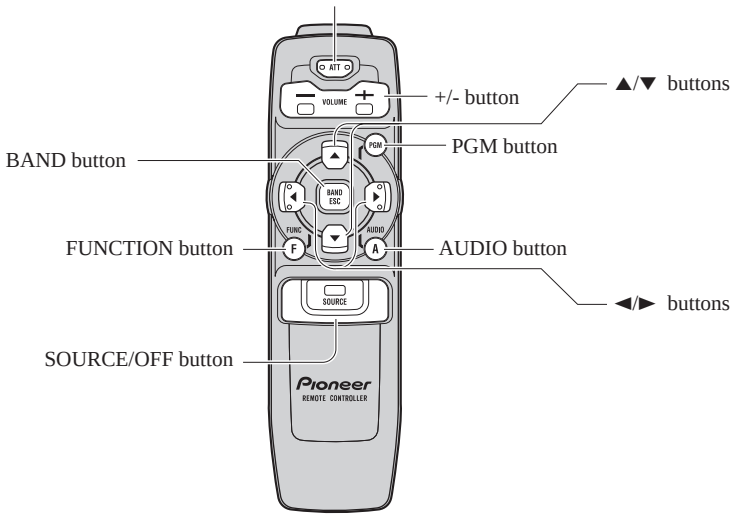
Head Unit(MEH-P5000/UC, MEH-P5050/ES)



Remote Controller

A remote controller that enables remote operation of the head unit is supplied. Operation is the same as when using buttons on the head unit.

ATT button
This lets you quickly lower volume level (by about 90%).
Press once more to return to the original volume level.



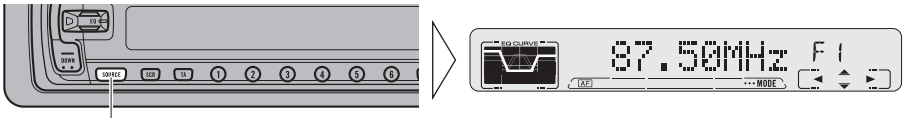
Basic Operation

To Listen to Music

The following explains the initial operations required before you can listen to music.

Note:
- Loading a disc in this product.

1. Select the desired source (e.g. tuner).

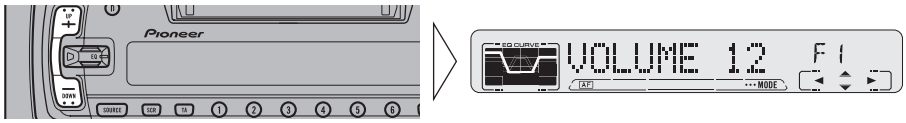


Each press changes the Source ...

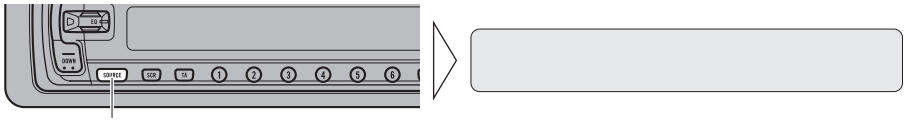
Each press of the SOURCE button selects the desired source in the following order:
CD player (one disc only) → Tuner → Built-in MD player → Multi-MD player → Multi-CD player → AUX

Note:
- In the following cases, the sound source will not change:
  * No CD player is connected to this product.
  * No Multi-CD player is connected to this product.
  * No Multi-MD player is connected to this product.
  * No disc is set in this product.
  * No disc is set in the CD player.
  * No magazine is set in the Multi-CD player.
  * No disc is set in the Multi-MD player.
  * AUX (external input) is set to OFF.

2. Raise or lower the volume.



3. Source OFF.



Hold for 1 second or more

Basic Operation

Basic Operation of Tuner

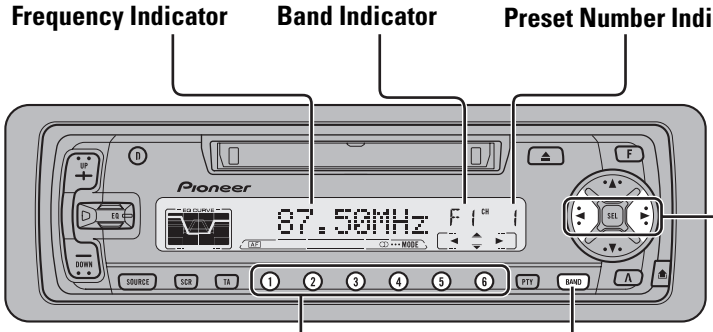
This product's AF function can be switched ON and OFF. AF should be switched OFF for normal tuning operations.

Manual and Seek Tuning

- **You can select the tuning method by changing the length of time you press the ◄/► button.**

Manual Tuning (step by step)	0.5 seconds or less
Seek Tuning	0.5 seconds or more

Note:
- If you continue pressing the button for longer than 0.5 seconds, you can skip broadcasting stations. Seek Tuning starts as soon as you stop pressing the button.
- "◯◯" stereo indicator lights when a stereo station is selected.



- **You can memorize broadcast stations in buttons 1 through 6 for easy, one-touch station recall.**

Preset station recall	2 seconds or less
Broadcast station preset memory	2 seconds or more

Note:
- Up to 18 FM stations (6 in F1 (FM1), F2 (FM2) and F3 (FM3)) and 6 MW/LW stations can be stored in memory.
- You can also use the ▲ or ▼ buttons to recall broadcast stations memorized in buttons 1 through 6.

Basic Operation

Basic Operation of Multi-CD Player

This product can control a multi-CD player. (With certain old type multi-CD players, using a multiple connection adapter lets you connect multiple units which you can control with this product.)

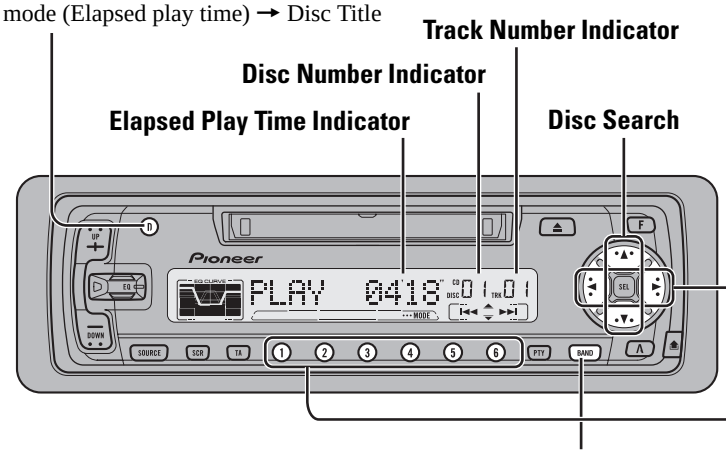
Track Search and Fast Forward/Reverse

- **You can select between Track Search or Fast forward/Reverse by pressing the ◄/► button for a different length of time.**

Track Search	0.5 seconds or less
Fast forward/Reverse	Continue pressing

Switching the Display

Each press of the DISP button changes the display in the following order:
Playback mode (Elapsed play time) → Disc Title



Switching the Multi-CD Player

When two or more multi-CD players are connected using a multiple connection adapter, you can select the multi-CD player by pressing the BAND button.

M-CD 1 → M-CD 2→ M-CD 3
(Displayed about for 2 seconds.)

When playing a CD TEXT disc on a CD TEXT compatible Multi-CD Player such as the CDX-P650:

- You can use the following two functions. Refer to Multi-CD Player's Owner's Manual for operation details.
  * Title display switching
  * Title scroll
- You cannot switch to the Disc Title Input mode in the Detailed Setting Menu.

Disc Number Search (for 6-Disc, 12-Disc types)

- **You can select discs directly with the 1 to 6 buttons. Just press the number corresponding to the disc you want to listen to.**

Note:
- When a 12-Disc Multi-CD Player is connected and you want to select disc 7 to 12, press the 1 to 6 buttons for 2 seconds or longer.

Disc Number Rough Search (for 50-Disc type only)

This handy function lets you select discs loaded in a 50-Disc Multi-CD Player using the 1 to 5 buttons. The 50 discs are divided into five blocks, with each of the 1 to 5 buttons assigned to a block.

- **Select the desired block with the 1 to 5 buttons.**

Note:
- After completing a rough search, use the ▲ and ▼ buttons to select a desired disc.

Note:
- If you switch displays when disc titles have not been input, “NO TITLE” is displayed .
- The multi-CD player may perform a preparatory operation, such as verifying the presence of a disc or reading disc information, when the power is turned ON or a new disc is selected for playback. “READY” is displayed.
- When a magazine is loaded into a 50-Disc type Multi-CD Player, information on all the discs in the magazine is read.
  If you start playing a disc on a 50-Disc type Multi-CD Player before reading of information on all discs has been completed, reading of information stops part way through. This will prevent you from using a number of functions. (If you try and use these functions, “NOT READY” is displayed.)
  If this happens, reading of information begins again when you switch to a component other than the 50-Disc type Multi-CD Player.
- If the multi-CD player cannot operate properly, an error message such as “ERROR-14” is displayed. Refer to the multi-CD player owner’s manual.
- If there are no discs in the multi-CD player magazine, “NO DISC” is displayed.
- “LOAD” will be displayed in the following cases:
  * If the disc in the extra tray in selected.
  * If the disc in moved from the extra tray to the magazine.
  (Refer to the 50-Disc type multi-CD player owner’s manual.)
- You cannot use the “Ejecting a Single Disc”, “Frequency Play”, “Music Group Play” or “ABC Disc Title Search” functions with this product.

Basic Operation of Built-in MD Player

Switching the Display

Each press of the DISP button changes the display in the following order:
Playback mode (Elapsed play time)
→ Disc Title → Track Title

Eject

Note:
- The MD function can be turned ON/OFF with the disc remaining in this product.
- Discs left partially inserted after ejection may incur damage or fall out.

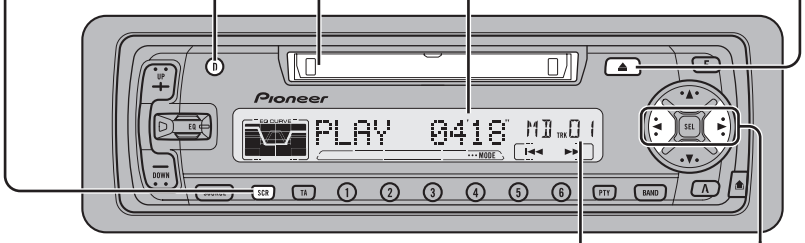
Disc Loading Slot

You can only load one MD at a time in the built-in MD player. Load the MD in the direction of the arrow, with the label side facing up.

Note:
- Load an MD after confirming the MD shutter is closed.

Scrolling the Display

Displayed disc and track names are only up to 10 letters long, but indications can be scrolled.



- **You can select between Track Search or Fast forward/Reverse by pressing the ◄/► button for a different length of time.**

Track Search	0.5 seconds or less
Fast forward/Reverse	Continue pressing

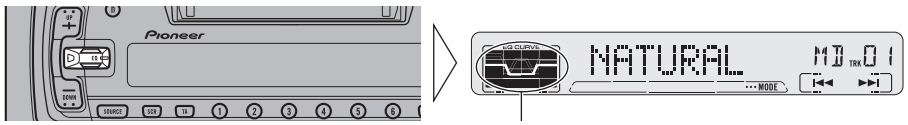
Note:
- When you load a disc, this product reads information recorded on the disc such as the number of tracks. While the disc is being read, "TOC READ" is indicated in the display.
- If you load a disc with the arrow pointing in the wrong direction, it is automatically ejected.
- If the built-in MD player cannot operate properly, an error message (such as "ERROR-11") appears on the display.

Audio Adjustment

Selecting the Equalizer Curve

You can switch between Equalizer curves.

- **Move the EQ button up or down to select the desired Equalizer curve.**



Equalizer curve

POWERFUL ↔ NATURAL ↔ VOCAL ↔ CUSTOM ↔ EQ FLAT ↔ SUPER BASS

Note:
- "CUSTOM" stores an equalizer curve you have made adjustments to.
- You can create different "CUSTOM" curves for different sources. (The CD player (one disc only) and multi-CD player are set to the same Equalizer Curve Adjustment setting automatically. The built-in MD player and multi-MD player are set to the same Equalizer Curve Adjustment setting automatically.)

Entering the Audio Menu

With this Menu, you can adjust the sound quality.

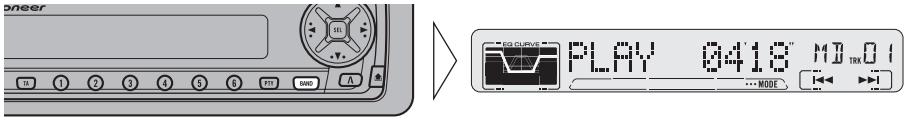
Note:
- After entering the Audio Menu, if you do not perform an operation within about 30 seconds, the Audio Menu is automatically canceled.

1. **Select the desired mode in the Audio Menu.**

Each press changes the Mode ...

2. **Operate a mode.**

3. **Cancel the Audio Menu.**



Audio Menu Functions

The Audio Menu features the following functions.

Balance Adjustment (FADER)

This function allows you to select a Fader/Balance setting that provides ideal listening conditions in all occupied seats.

1. **Press the AUDIO button and select Fader/Balance mode (FADER) in the Audio Menu.**
2. **Adjust front/rear speaker balance with the ▲/▼ buttons.**
   "FADER F15" – "FADER R15" is displayed as it moves from front to rear.

3. **Adjust left/right speaker balance with the ◄/► buttons.**
   "BAL L 9" – "BAL R 9" is displayed as it moves from left to right.

Note:
- "FADER 0" is the proper setting when 2 speakers are in use.

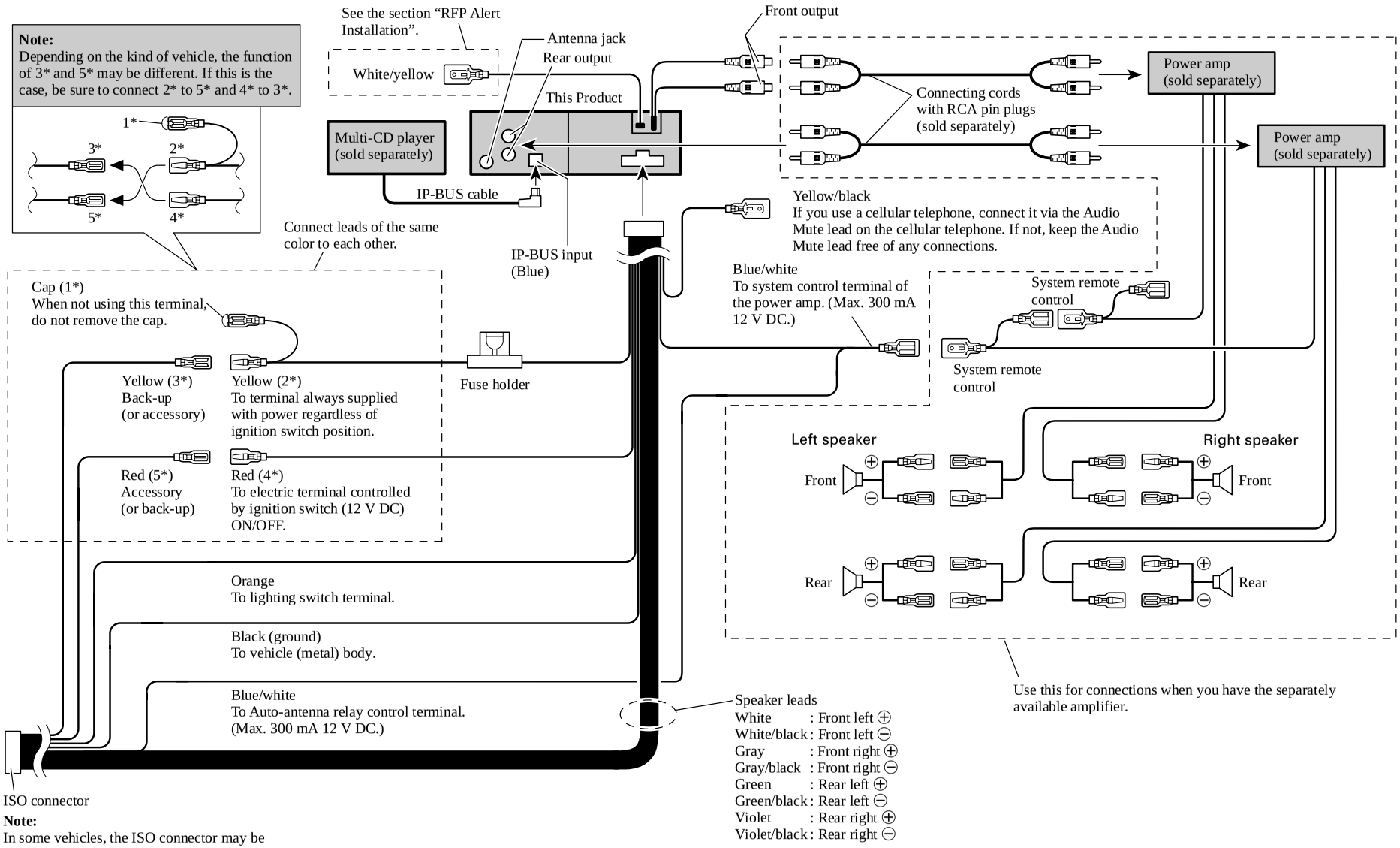
Equalizer Curve Adjustment (EQ-LOW/MID/HIGH)

You can adjust equalizer curve settings as desired. Adjusted equalizer curve settings are memorized in "CUSTOM".

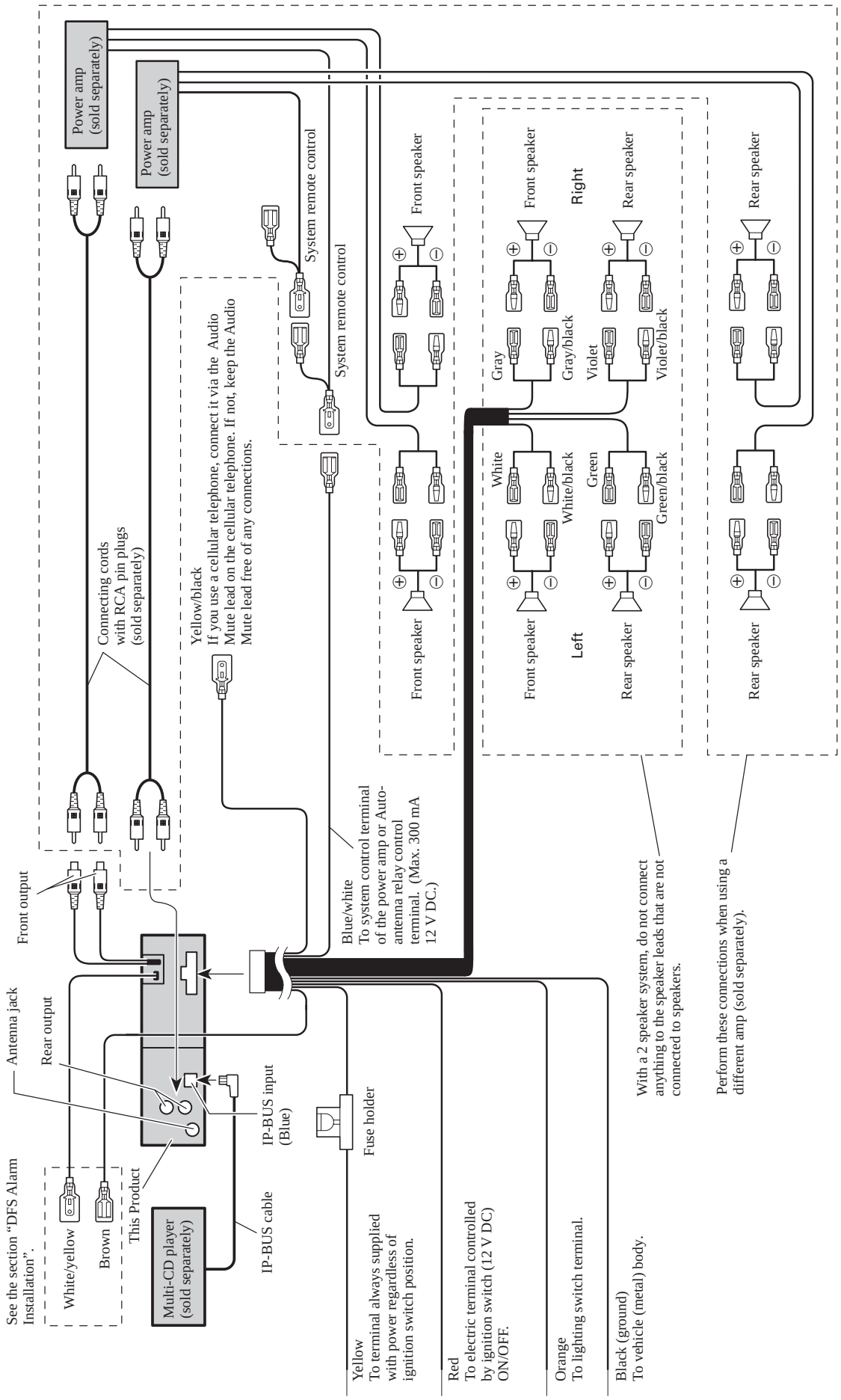
1. **Press the AUDIO button and select the Equalizer mode (EQ-LOW/MID/HIGH) in the Audio Menu.**
2. **Select the band you want to adjust with the ◄/► buttons.**
   EQ-LOW ↔ EQ-MID ↔ EQ-HIGH

Continued overleaf.

● MEH-P5000RII/EW


Note:
Depending on the kind of vehicle, the function of 3* and 5* may be different. If this is the case, be sure to connect 2* to 5* and 4* to 3*.
1*
2*
3*
4*
5*
See the section "RFP Alert Installation".
White/yellow
Antenna jack
Rear output
This Product
Front output
Multi-CD player (sold separately)
IP-BUS cable
IP-BUS input (Blue)
Connecting cords with RCA pin plugs (sold separately)
Power amp (sold separately)
Power amp (sold separately)
Yellow/black
If you use a cellular telephone, connect it via the Audio Mute lead on the cellular telephone. If not, keep the Audio Mute lead free of any connections.
Connect leads of the same color to each other.
Blue/white
To system control terminal of the power amp. (Max. 300 mA 12 V DC.)
System remote control
System remote control
Cap (1*)
When not using this terminal, do not remove the cap.
Fuse holder
Yellow (3*)
Back-up
(or accessory)
Yellow (2*)
To terminal always supplied with power regardless of ignition switch position.
Red (5*)
Accessory
(or back-up)
Red (4*)
To electric terminal controlled by ignition switch (12 V DC) ON/OFF.
Left speaker
Right speaker
Front
Front
Rear
Rear
Orange
To lighting switch terminal.
Black (ground)
To vehicle (metal) body.
Blue/white
To Auto-antenna relay control terminal.
(Max. 300 mA 12 V DC.)
Use this for connections when you have the separately available amplifier.
Speaker leads
White : Front left ⊕
White/black : Front left ⊖
Gray : Front right ⊕
Gray/black : Front right ⊖
Green : Rear left ⊕
Green/black : Rear left ⊖
Violet : Rear right ⊕
Violet/black : Rear right ⊖
ISO connector
Note:
In some vehicles, the ISO connector may be divided into two. If this is the case, be sure to connect to both connectors.

● **MEH-P5000/UC, MEH-P5050/ES**



8.2 SPECIFICATIONS

● MEH-P5000RII/EW

General

Power source ..... 14.4 V DC (10.8 – 15.1 V allowable)
Grounding system ..... Negative type
Max. current consumption ..... 10.0 A
Dimensions
(mounting size) ..... 178 (W) × 50 (H) × 150 (D) mm
(front face) ..... 188 (W) × 58 (H) × 18 (D) mm
Weight ..... 1.3 kg

Amplifier

Maximum power output ..... 45 W × 4
Continuous power output ..... 27 W × 4
(DIN45324, +B = 14.4 V)
Load impedance ..... 4 Ω (4 – 8 Ω allowable)
Preout output level/output impedance ..... 2.2 V/1 kΩ
Equalizer (3-Band Parametric Equalizer)
(Low) ..... Frequency: 40/80/100/160 Hz
Q Factor: 0.35/0.59/0.95/1.15
(+6 dB when boosted)
Level: ±12 dB
(Mid) ..... Frequency: 200/500/1k/2k Hz
Q Factor: 0.35/0.59/0.95/1.15
(+6 dB when boosted)
Level: ±12 dB
(High) ..... Frequency: 3.15k/8k/10k/12.5k Hz
Q Factor: 0.35/0.59/0.95/1.15
(+6 dB when boosted)
Level: ±12 dB
Loudness contour
(Low) ..... +3.5 dB (100 Hz), +3 dB (10 kHz)
(volume: –30 dB)
(Mid) ..... +10 dB (100 Hz), +6.5 dB (10 kHz)
(volume: –30 dB)
(High) ..... +11 dB (100 Hz), +11 dB (10 kHz)
(volume: –30 dB)

MD player

System ..... Mini disc digital audio system
Usable discs ..... Mini disc
Signal format ..... Sampling frequency: 44.1 kHz
Number of quantization bits: 16; linear
Frequency characteristics ..... 20 – 20,000 Hz (±1 dB)
Signal-to-noise ratio ..... 94 dB (1 kHz) (IEC-A network)
Dynamic range ..... 93 dB (1 kHz)
Number of channels ..... 2 (stereo)

FM tuner

Frequency range ..... 87.5 – 108 MHz
Usable sensitivity
..... 11 dBf (1.0 µV/75 Ω, mono, S/N: 30 dB)
50 dB quieting sensitivity .... 16 dBf (1.7 µV/75 Ω, mono)
Signal-to-noise ratio ..... 70 dB (IEC-A network)
Distortion ..... 0.3% (at 65 dBf, 1 kHz, stereo)
Frequency response ..... 30 – 15,000 Hz (±3 dB)
Stereo separation ..... 40 dB (at 65 dBf, 1 kHz)

MW tuner

Frequency range ..... 531 – 1,602 kHz
Usable sensitivity ..... 18 µV (S/N: 20 dB)
Selectivity ..... 50 dB (±9 kHz)

LW tuner

Frequency range ..... 153 – 281 kHz
Usable sensitivity ..... 30 µV (S/N: 20 dB)
Selectivity ..... 50 dB (±9 kHz)

Note:

- US and foreign patents licensed from Dolby Laboratories Licensing Corporation.
- Specifications and the design are subject to possible modification without notice due to improvements.

● MEH-P5000/UC

General

Power source ..... 14.4 V DC (10.8 – 15.1 V allowable)
Grounding system ..... Negative type
Max. current consumption ..... 10.0 A
Dimensions
(DIN) (chassis) ..... 178 (W) × 50 (H) × 150 (D) mm
[7 (W) × 2 (H) × 5-7/8 (D) in]
(nose) ..... 188 (W) × 58 (H) × 18 (D) mm
[7-3/8 (W) × 2-1/4 (H) × 3/4 (D) in]
(D) (chassis) ..... 178 (W) × 50 (H) × 155 (D) mm
[7 (W) × 2 (H) × 6-1/8 (D) in]
(nose) ..... 170 (W) × 48 (H) × 13 (D) mm
[6-3/4 (W) × 1-7/8 (H) × 1/2 (D) in]
Weight ..... 1.3 kg (2.9 lbs)

Amplifier

Continuous power output is 22 W per channel min. into 4 ohms, both channels driven 50 to 15,000 Hz with no more than 5% THD.
Maximum power output ..... 45 W × 4
Load impedance ..... 4 Ω (4 – 8 Ω allowable)
Preout maximum output level/output impedance
..... 2.2 V/1 kΩ
Equalizer (3-Band Parametric Equalizer)
(Low) ..... Frequency: 40/80/100/160 Hz
Q Factor: 0.35/0.59/0.95/1.15
(+6 dB when boosted)
Level: ±12 dB
(Mid) ..... Frequency: 200/500/1k/2k Hz
Q Factor: 0.35/0.59/0.95/1.15
(+6 dB when boosted)
Level: ±12 dB
(High) ..... Frequency: 3.15k/8k/10k/12.5k Hz
Q Factor: 0.35/0.59/0.95/1.15
(+6 dB when boosted)
Level: ±12 dB
Loudness contour
(Low) ..... +3.5 dB (100 Hz), +3 dB (10 kHz)
(volume: –30 dB)
(Mid) ..... +10 dB (100 Hz), +6.5 dB (10 kHz)
(volume: –30 dB)
(High) ..... +11 dB (100 Hz), +11 dB (10 kHz)
(volume: –30 dB)

MD player

System ..... Mini disc digital audio system
Usable discs ..... Mini disc
Signal format ..... Sampling frequency: 44.1 kHz
Number of quantization bits: 16; linear
Frequency characteristics ..... 20 – 20,000 Hz (±1 dB)
Signal-to-noise ratio ..... 94 dB (1 kHz) (IHF-A network)
Dynamic range ..... 93 dB (1 kHz)
Number of channels ..... 2 (stereo)

FM tuner

Frequency range ..... 87.9 – 107.9 MHz
Usable sensitivity
..... 11 dBf (1.0 µV/75 Ω, mono, S/N: 30 dB)
50 dB quieting sensitivity .... 16 dBf (1.7 µV/75 Ω, mono)
Signal-to-noise ratio ..... 70 dB (IHF-A network)
Distortion ..... 0.3% (at 65 dBf, 1 kHz, stereo)
Frequency response ..... 30 – 15,000 Hz (±3 dB)
Stereo separation ..... 40 dB (at 65 dBf, 1 kHz)
Selectivity ..... 70 dB (2ACA)
Three-signal intermodulation
(desired signal level) ..... 30 dBf
(two undesired signal level: 100 dBf)

AM tuner

Frequency range ..... 530 – 1,710 kHz
Usable sensitivity ..... 18 µV (S/N: 20 dB)
Selectivity ..... 50 dB (±10 kHz)

Note:

- US and foreign patents licensed from Dolby Laboratories Licensing Corporation.
- Specifications and the design are subject to possible modification without notice due to improvements.

● MEH-P5050/ES

General

Power source ..... 14.4 V DC (10.8 – 15.1 V allowable)
Grounding system ..... Negative type
Max. current consumption ..... 10.0 A
Dimensions
(DIN) (chassis) ..... 178 (W) × 50 (H) × 150 (D) mm
(nose) ..... 188 (W) × 58 (H) × 18 (D) mm
(D) (chassis) ..... 178 (W) × 50 (H) × 155 (D) mm
(nose) ..... 170 (W) × 48 (H) × 13 (D) mm
Weight ..... 1.3 kg

Amplifier

Continuous power output is 22 W per channel min. into 4 ohms, both channels driven 50 to 15,000 Hz with no more than 5% THD.
Maximum power output ..... 45 W × 4
Load impedance ..... 4 Ω (4 – 8 Ω allowable)
Preout maximum output level/output impedance
..... 2.2 V/1 kΩ
Equalizer (3-Band Parametric Equalizer)
(Low) ..... Frequency: 40/80/100/160 Hz
Q Factor: 0.35/0.59/0.95/1.15
(+6 dB when boosted)
Level: ±12 dB
(Mid) ..... Frequency: 200/500/1k/2k Hz
Q Factor: 0.35/0.59/0.95/1.15
(+6 dB when boosted)
Level: ±12 dB
(High) ..... Frequency: 3.15k/8k/10k/12.5k Hz
Q Factor: 0.35/0.59/0.95/1.15
(+6 dB when boosted)
Level: ±12 dB
Loudness contour
(Low) ..... +3.5 dB (100 Hz), +3 dB (10 kHz)
(volume: –30 dB)
(Mid) ..... +10 dB (100 Hz), +6.5 dB (10 kHz)
(volume: –30 dB)
(High) ..... +11 dB (100 Hz), +11 dB (10 kHz)
(volume: –30 dB)

MD player

System ..... Mini disc digital audio system
Usable discs ..... Mini disc
Signal format ..... Sampling frequency: 44.1 kHz
Number of quantization bits: 16; linear
Frequency characteristics ..... 20 – 20,000 Hz (±1 dB)
Signal-to-noise ratio ..... 94 dB (1 kHz) (IEC-A network)
Dynamic range ..... 93 dB (1 kHz)
Number of channels ..... 2 (stereo)

FM tuner

Frequency range ..... 87.5 – 108 MHz
Usable sensitivity
..... 11 dBf (1.0 µV/75 Ω, mono, S/N: 30 dB)
50 dB quieting sensitivity .... 16 dBf (1.7 µV/75 Ω, mono)
Signal-to-noise ratio ..... 70 dB (IEC-A network)
Distortion ..... 0.3% (at 65 dBf, 1 kHz, stereo)
Frequency response ..... 30 – 15,000 Hz (±3 dB)
Stereo separation ..... 40 dB (at 65 dBf, 1 kHz)

AM tuner

Frequency range ..... 531 – 1,602 kHz (9 kHz)
530 – 1,710 kHz (10 kHz)
Usable sensitivity ..... 18 µV (S/N: 20 dB)
Selectivity ..... 50 dB (±9 kHz)
50 dB (±10 kHz)

Note:

- US and foreign patents licensed from Dolby Laboratories Licensing Corporation.
- Specifications and the design are subject to possible modification without notice due to improvements.